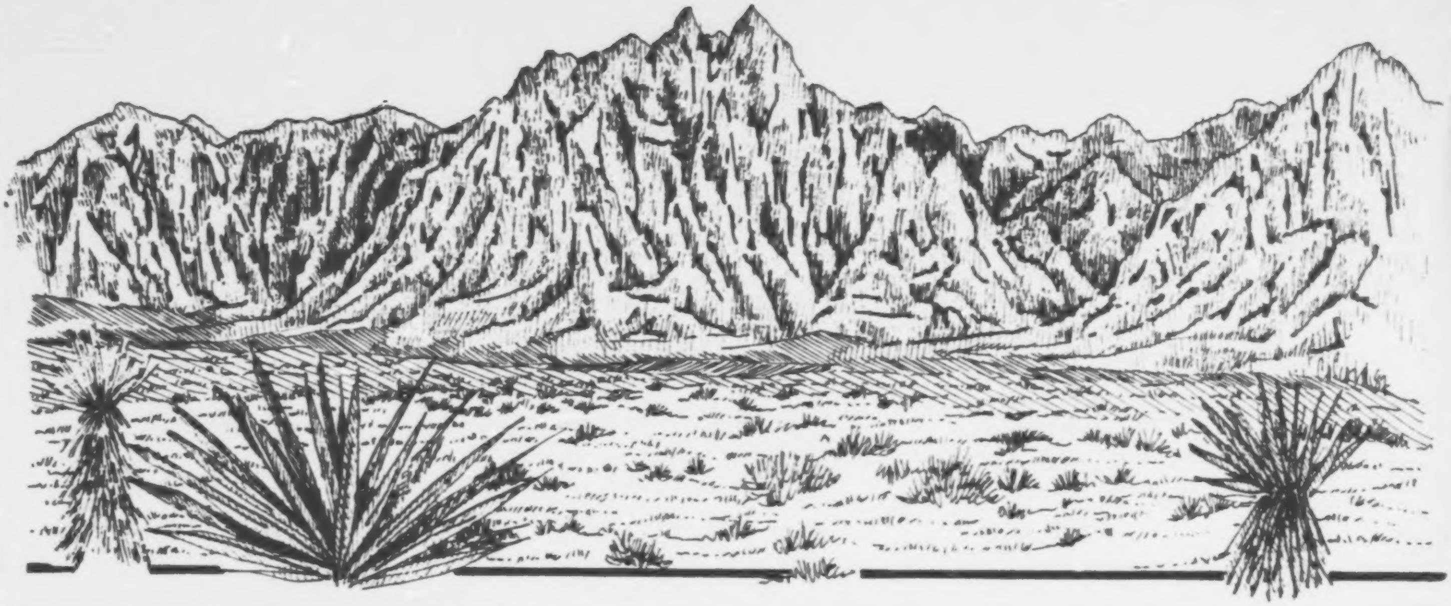
C 12/3



C·A·L·I·E·N·T·E

WILDERNESS RECOMMENDATIONS

FINAL ENVIRONMENTAL IMPACT STATEMENT

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Las Vegas District Office
Las Vegas, Nevada

I 1.98:

READEX FICHE best copy available

FINAL ENVIRONMENTAL IMPACT STATEMENT

WILDERNESS RECOMMENDATIONS

for

CALIENTE RESOURCE AREA

NEVADA

Prepared by

DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

LAS VEGAS DISTRICT

Ben F. Collin

Ben F. Collins
Las Vegas District Manager

Edward F. Spang
State Director, Nevada

The proposed land use plan contains wilderness recommendations on 591,753 acres of public land in southern Lincoln and northeastern Clark Counties, Nevada. The action responds to the mandate of Section 603 of the Federal Land Policy and Management Act of 1976 to review aLL public land roadless areas of 5,000 acres or more; determine their suitability or nonsuitability for wilderness designation; and report these suitability recommendations to the President no later than October 21, 1991.

For further information contact: Mr. Frank Maxwell, EIS Team Leader, at 4765 W. Vegas Drive, or P.O. Box 26569, Las Vegas, Nevada 89126, or call (702) 646-8800 or FTS 598-5800.

Date the final environmental impact statement with the wilderness recommendations was made available to the public:

BLM-LV PT-88-014-8500

SUMMARY

SUMMARY

Summary

The purpose of the Proposed Action in four of the Wilderness Study Areas (WSAs) examined in this environmental impact statement, as the Wilderness Act states, "Is to secure for the American people of present and future generations the benefits of an enduring resource of wilderness" by recommending all or portions of these WSAs as suitable for wilderness designation. In one WSA, the purpose is to continue to manage the area for uses other than wilderness. This EIS analyzes the potential impacts of designating or not designating as wilderness, all or portions of five WSAs, comprising 588,423 acres, in southern Lincoln and northern Clark Counties, Nevada, and to identify reasonable alternatives. The Proposed Action represents the Bureau of Land Management's wilderness recommendations developed through the Bureau planning system for these five WSAs .

The WSAs and the recommendations by alternative, appear in Table S-1.

Issues

The scoping process for the Caliente Wilderness EIS developed issues identified by Bureau staff, by the public during formal scoping comment periods on issue identification in Caliente and in Las Vegas, Nevada (June, 1983) and from comments on the draft EIS by the public and by Federal, State and local agencies. The environmental issues identified for analysis in this EIS follow:

1. Impacts on Wilderness Values
2. Impacts on Development of Mineral Resources
3. Impacts on Motorized Recreational Use
4. Impacts on Grazing Facility Maintenance and Construction
5. Impacts on Increased Production of Deer and Bighorn Sheep as Related to Vegetation Manipulation
6. Impacts on Cultural Resources
7. Impacts on Water Quality in the Clover Mountains WSA
8. Impacts on the Development of Utilities

The following potential issues were identified in scoping but were not selected for detailed analysis in this EIS:

Impacts on Bighorn Reintroductions and Management
Impacts on Wild Horse and Burro Management
Impacts on Military Overflights
Impacts on Electronic Site Availability
Impacts on Threatened and Endangered Species
Impacts on Air Quality Classification

Alternatives

The alternatives analyzed in this EIS include:

A **Proposed Action** for each WSA
An All Wilderness for each WSA
A No Wilderness for each WSA
Partial Wilderness alternative(s)

SOUTH PAHROC RANGE WSA (NV-050-0132)

Proposed Action

Most of the South Pahroc Range WSA, 28,395 acres, is recommended suitable for wilderness designation. Recommended as nonsuitable are 205 acres.

This area shows very little evidence anywhere of man, and its naturalness, solitude and opportunities for primitive and unconfined recreation would be retained for the long term.

An occasionally operating perlite mine which is located adjacent and external to the WSA boundary, could expand, if necessary, into a continuation of reserves now being mined.

Motorized use of 50 visitor-days would be displaced to surrounding lands and an additional 250 visitor-days of non-motorized use would occur.

All Wilderness Alternative

No Wilderness Alternative

CLOVER MOUNTAINS WSA (NV-050-0139)

Proposed Action

A total of 84,165 acres is recommended as suitable for wilderness designation. Recommended as nonsuitable for wilderness designation are 770 acres.

TABLE S-1
ACREAGES FOR CALIENTE WILDERNESS EIS ALTERNATIVES

Recommended Suitable by Alternative

Wilderness Study Area	Total Acreage	Proposed Action		All Wilderness		No Wilderness		Resource Development		Wilderness Accent	
		Acres	%	Acres	%	Acres	%	Acres	%	Acres	%
0132 South Pahroc Range	28,600	28,395	99	28,600	100	0	0	25,775	86	28,600	100
0139 Clover Mountains	84,935	84,165	99	84,935	100	0	0	53,090	63	86,020*	101
0156 Meadow Valley Range	185,744	97,180	52	185,744	100	0	0	17,165	9	166,500	90
0161 Mormon Mountains	162,887	123,130	16	152,887	100	0	0	23,960	15	123,130**	76
0177 Delamar Mountains	126,257	0	0	126,257	100	0	0	48,164	38	102,490	81
Grand Totals	588,423	332,870	57	588,423	100	0	0	168,154	29	506,740	86
Percent of Resource Area			10		17		0		5		15

*Additional acres resulted from boundary adjustment to enhance management
**Same as Proposed Action

Source: U.S. Department of Interior, Bureau of Land Management, Caliente Wilderness EIS Team, 1988.

Outstanding wilderness values of naturalness, solitude and opportunities for primitive recreation would be retained. Most of the watershed of an entire flowing stream system will be in protective status.

Greater protection of cultural resources, including an historic cabin, would occur.

An increase of approximately twenty-five visitor days of motorized recreational use would occur. Non-motorized recreational visitation would increase to 625 visitor days annually.

All Wilderness Alternative

No Wilderness Alternative

Resource Development Alternative

Wilderness Accent Alternative

MEADOW VALLEY RANGE WSA

(NV-050-0156)

Proposed Action

A total of 97,180 acres of the Meadow Valley Range WSA is recommended as suitable for wilderness designation, while 88,564 acres are recommended as nonsuitable.

Good to excellent wilderness values of naturalness solitude and primitive recreation opportunities would be retained in the area recommended as suitable. The area recommended as nonsuitable would lose most of its naturalness, some of its values of solitude and most of its primitive recreation opportunities, over the long term. These wilderness values range from mediocre to excellent. In the area designated as wilderness, 75 visitor-days of motorized recreational use would be displaced to surrounding public lands and non-motorized recreational use would rise to 150 visitor-days. In the area designated nonsuitable, motorized recreational use would rise from the current 150 visitor-days to 400 visitor-days. Non-motorized recreational use would rise from 50 visitor-days to 200 visitor-days annually.

All Wilderness Alternative

No Wilderness Alternative

Resource Development Alternative

Wilderness Accent Alternative

MORMON MOUNTAINS WSA

(NV-050-0161)

Proposed Action

A total of the 123,130 acres of Mormon Mountains WSA, is recommended as suitable for wilderness designation, while the 39,757 acres are recommended as nonsuitable.

Excellent to outstanding naturalness, solitude and primitive recreation opportunities would be retained in protective status for this highly scenic and popular area. Naturalness and solitude ranging from good to outstanding would deteriorate in portions of the area recommended as nonsuitable. Much greater protection of most of the Mormon Mountains bountiful cultural resources would occur.

Motorized recreation use would grow to 525 annual visitor-days while non-motorized recreational use would grow slowly from the current annual 350 visitor-days to 900 visitor-days.

Wildlife projects would be more difficult to install and maintain. Redesign or removal of an existing guzzler may be necessary to meet wilderness standards.

All Wilderness Alternative

No Wilderness Alternative

Resource Development Alternative

DELAMAR MOUNTAINS WSA

(NV-050-0177)

Proposed Action

None of the 126,257 acres of the Delamar Mountains WSA is recommended as suitable for wilderness designation.

Wilderness values of naturalness, solitude, and primitive recreation opportunities ranging from moderate to outstanding would be retained on twenty-five to thirty percent of the area.

Motorized recreational use would rise slowly from one hundred visitor-days to two hundred visitor-days annually, while non-motorized recreational use would rise slowly from twenty-five visitor-days to seventy-five visitor-days annually.

A shorter, more environmentally acceptable corridor for utilities would become available.

All Wilderness Alternative

Resource Development Alternative

Wilderness Accent Alternative

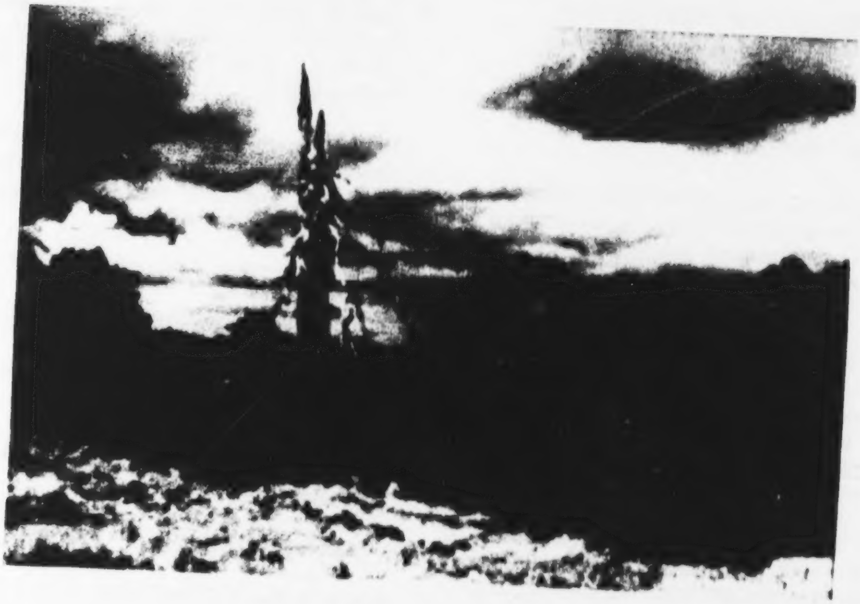


TABLE OF CONTENTS

TABLE OF CONTENTS

SUMMARY..................S-1

CHAPTER 1: INTRODUCTION, PLANNING AND STUDY PROCESS

Purpose/Need.............1-1
Wilderness Review........1-2
Interim Management.......1-4
Management of Designated Wilderness Areas.........1-4
Issue Identification and Scoping.................1-4
Issues Analyzed..........1-4
Issues Not Analyzed......1-5
Formulation of Alternatives.............1-6
Alternatives Considered and Dropped.................1-7

CHAPTER 2: PROPOSED ACTION AND ALTERNATIVES

South Pahroc Range WSA (NV-050-0132)

Proposed Action
- Mineral Resource Actions.............2-1
- Recreation Management Actions.............2-1
- Grazing Facility Maintenance and Construction.........2-2
- Wildlife Management Actions.............2-2

All Wilderness Alternative
- Mineral Resource Actions.............2-2
- Recreation Management Actions.............2-2
- Grazing Facility Maintenance and Construction.........2-3
- Wildlife Management Actions.............2-3

No Wilderness Alternative
- Mineral Resource Actions.............2-3
- Recreation Management Actions...............2-3
- Grazing Facility Maintenance and Construction..........2-4
- Wildlife Management Actions...............2-4

Resource Development Alternative................2-4

Summary Table of Impacts...2-5

Clover Mountain WSA (NV-050-0139)

Proposed Action
- Mineral Resource Actions...............2-6
- Recreation Management Actions...............2-6
- Grazing Facility Maintenance and Construction..........2-7
- Wildlife Management Actions...............2-7
- Water Resource Management............2-7

All Wilderness Alternative
- Mineral Resource Actions...............2-7
- Recreation Management Actions...............2-8
- Grazing Facility Maintenance and Construction..........2-8
- Wildlife Management Actions...............2-8
- Water Resource Management............2-8

No Wilderness Alternative
- Mineral Resource Actions...............2-8
- Recreation Management Actions...............2-9
- Grazing Facility Maintenance and Construction..........2-9
- Wildlife Management Actions...............2-9
- Water Resource Management............2-9

Resource Development Alternative
Mineral Resource Actions............2-10
Recreation Management Actions............2-10
Grazing Facility Maintenance and Construction.......2-11
Wildlife Management Actions............2-11
Water Resource Management..........2-11

Wilderness Accent Alternative
Mineral Resource Actions.............2-11
Recreation Management Actions.............2-11
Grazing Facility Maintenance and Construction........2-12
Wildlife Management Actions.............2-12
Water Resource Management..........2-13

Summary Table of Impacts.2-14

Meadow Valley Range WSA (NV-050-0156)

Proposed Action
Mineral Resource Actions............2-16
Recreation Management Actions............2-16
Grazing Facility Maintenance and Construction........2-17
Wildlife Management Actions.............2-17

All Wilderness Alternative
Mineral Resource Actions.............2-17
Recreation Management Actions............2-18
Grazing Facility Maintenance and Construction........2-18
Wildlife Management Actions............2-18

No Wilderness Alternative
Mineral Resource Actions...............2-18
Recreation Management Actions..............2-19
Grazing Facility Maintenance and Construction.........2-19
Wildlife Management Actions..............2-19

Resource Development Alternative
Mineral Resource Actions..............2-19
Recreation Management Actions..............2-20
Grazing Facility Maintenance and Construction.........2-20
Wildlife Management Actions..............2-21

Wilderness Accent Alternative
Mineral Resource Actions..............2-21
Recreation Management Actions..............2-21
Grazing Facility Maintenance and Construction.........2-22
Wildlife Management Actions..............2-22

Summary Table of Impacts..2-23

Mormon Mountains WSA (NV-050-0161)

Proposed Action
Mineral Resource Actions..............2-22
Recreation Management Actions.............2-24
Grazing Facility Maintenance and Construction.........2-24
Wildlife Management Actions..............2-24

All Wilderness Alternative
Mineral Resources Actions..............2-25

Recreation Management Actions.............2-25
Grazing Facility Maintenance and Construction........2-25
Wildlife Management Actions.............2-25

No Wilderness Alternative

Mineral Resource Actions.............2-26
Recreation Management Actions.............2-26
Grazing Facility Maintenance and Construction........2-27
Wildlife Management Actions.............2-27
Lands...............2-27

Resource Development Alternative

Mineral Resource Actions.............2-27
Recreation Management Actions.............2-28
Grazing Facility Maintenance and Construction........2-28
Wildlife Management Actions.............2-29

Summary Table of Impacts.2-30

Delamar Mountains WSA (NV-050-0177)

Proposed Action

Mineral Resource Actions.............2-32
Recreation Management Actions.............2-32
Grazing Facility Maintenance and Construction........2-32
Wildlife Management Actions.............2-33
Realty Management Actions.............2-33

All Wilderness Alternative

Mineral Resource Actions.............2-33
Recreation Management Actions..............2-32
Grazing Facility Maintenance and Construction.........2-33
Wildlife Management Actions..............2-33
Realty Management Actions..............2-33

Resource Development Alternative

Mineral Resource Actions..............2-34
Recreation Management Actions..............2-34
Grazing Facility Maintenance and Construction.........2-35
Wildlife Management Actions..............2-35
Realty Management Actions..............2-35

Wilderness Accent Alternative

Mineral Resource Actions..............2-35
Recreation Management Actions..............2-36
Grazing Facility Maintenance and Construction.........2-36
Wildlife Management Actions..............2-36
Realty Management Actions..............2-36

Summary Table of Impacts..2-37

CHAPTER 3: AFFECTED ENVIRONMENT

South Pahroc Range WSA (NV-050-0132)

General Characteristics....3-1
Land Status................3-1
Wilderness Values..........3-1
Recreation.................3-1
Cultural Resources.........3-2
Energy & Mineral Resources.3-2
Livestock Management.......3-2
Wildlife 3-9

Water Resources..........3-9
Air Quality..............3-9

Clover Mountains WSA
(NV-050-0139)

General Characteristics..3-9
Land Status..............3-9
Wilderness Values........3-9
Recreation...............3-11
Cultural Resources.......3-11
Energy & Mineral
Resources................3-11
Livestock Management.....3-12
Wildlife 3-12
Water Resources..........3-12
Air Quality..............3-12

Meadow Valley Range WSA
(NV-050-0156)

General Characteristics..3-18
Land Status..............3-18
Wilderness Values........3-18
Recreation...............3-19
Cultural Resources.......3-19
Energy and Mineral
Resources................3-19
Livestock Management.....3-20
Lands....................3-20
Wildlife 3-20
Wild Horses 3-20
Water Resources..........3-20
Air Quality..............3-20

Mormon Mountains WSA
(NV-050-0161)

General Characteristics..3-27
Land Status..............3-27
Wilderness Values........3-27
Recreation...............3-27
Cultural Resources.......3-28
Energy and Mineral
Resources................3-28
Livestock Management.....3-29
Wildlife 3-29
Wild Horses..............3-29
Lands....................3-29
Water Resources..........3-29
Air Quality..............3-29

Delamar Mountains WSA
(NV-050-0177)

General Characteristics..3-36
Land Status..............3-36
Wilderness Values........3-36
Recreation...............3-37
Cultural Resources.......3-37
Energy and Mineral
Resources................3-37
Livestock Management.....3-38
Wildlife 3-38
Lands....................3-38
Water Resources..........3-38
Air Quality..............3-38

CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

South Pahroc Range WSA
(NV-050-0132)

Proposed Action

    Impacts on Wilderness
    Values...............4-1

    Impacts on Development of
    Mineral Resources....4-2

    Adverse Impacts which
    Cannot be Avoided....4-2

    Short Term Uses vs. Long
    Term Productivity....4-2

    Irreversible and
    Irretrievable Commitment
    of Resources.........4-4

All Wilderness Alternative

    Impacts on Wilderness
    Values...............4-4

    Impacts on Development of
    Mineral Resources....4-4

No Wilderness Alternative

    Impacts on Wilderness
    Values...............4-5

    Impacts on Development of
    Mineral Resources....4-6

Clover Mountains WSA
(NV-050-0139)
Proposed Action
Impacts on Wilderness Values...............4-7
Impacts on Development of Mineral Resources....4-8
Impacts on Motorized Recreation Resources.4-8
Impacts on Production of Deer.................4-9
Impacts on Water Quality..............4-9
Adverse Impacts which Cannot be Avoided....4-9
Short Term Uses vs. Long Term Productivity....4-9
Irreversible and Irretrievable Commitment of Resources.........4-10
All Wilderness Alternative
Impacts on Wilderness Values...............4-10
Impacts on Development of Mineral Resources....4-11
Impacts on Motorized Recreation Resources.4-12
Impacts on Production of Deer.................4-12
Impacts on Water Quality..............4-12
No Wilderness Alternative
Impacts on Wilderness Values...............4-12
Impacts on Development of Mineral Resources....4-13
Impacts on Motorized Recreation Resources.4-14
Impacts on Production of Deer.................4-14
Impacts on Water Quality..............4-15
Resource Development Mineral Resources
Impacts on Wilderness Values..............4-15
Impacts on Development of Mineral Resources ...4-16
Impacts on Motorized Recreation Resources 4-17
Impacts on Production of Deer.................4-17
Impacts on Water Quality..............4-18
Wilderness Accent Alternative
Impacts on Wilderness Values...............4-18
Impacts on Development of Mineral Resources....4-19
Impacts on Motorized Recreation Resources.4-20
Impacts on Production of Deer.................4-20
Impacts on Water Quality..............4-20
Meadow Valley Range WSA
(NV-050-0156)
Proposed Actions
Impacts on Wilderness Values..............4-21
Impacts on Development of Mineral Resources....4-23
Impacts on Motorized Recreation Resources.4-23

Impacts on Grazing Facility Maintenance and Construction.........4-24

Adverse Impacts which Cannot be Avoided....4-24

Short Term Uses vs. Long Term Productivity....4-24

Irreversible and Irretrievable Commitment of Resources.........4-24

All Wilderness Alternative

Impacts on Wilderness Values...............4-24

Impacts on Development of Mineral Resources....4-26

Impacts on Motorized Recreation Resources.4-26

Impacts on Grazing facility Maintenance and Construction.........4-26

No Wilderness Alternative

Impacts on Wilderness Values...............4-27

Impacts on Development of Mineral Resources....4-29

Impacts on Motorized Recreation Resources.4-29

Impacts on Grazing facility Maintenance and Construction.........4-29

Resource Development Alternative

Impacts on Wilderness Values...............4-30

Impacts on Development of Mineral Resources....4-31

Impacts on Motorized Recreation Resources.4-32

Impacts on Grazing facility Maintenance and Construction.........4-32

Wilderness Accent Alternative

Impacts on Wilderness Values...............4-33

Impacts on Development of Mineral Resources....4-34

Impacts on Motorized Recreation Resources.4-35

Impacts on Grazing facility Maintenance and Construction.........4-35

Mormon Mountnain WSA (NV-050-0161)

Proposed Action

Impacts on Wilderness Values...............4-37

Impacts on Development of Mineral Resources....4-39

Impacts on Motorized Recreation Resources.4-40

Impacts on Production of Bighorn Sheep........4-40

Impacts on Cultural Resources............4-41

Adverse Impacts which Cannot be Avoided....4-42

Short Term Uses vs. Long Term Productivity....4-42

Irreversible and Irretrievable Commitment of Resources.........4-42

All Wilderness Alternative

Impacts on Wilderness Values...............4-42

Impacts on Development of Mineral Resources....4-43

Impacts on Motorized Recreation Resources 4-44

Impacts on Production of Bighorn Sheep........4-44

Impacts on Cultural Resources............4-45

No Wilderness Alternative
Impacts on Wilderness Values...............4-45

Impacts on Development of Mineral Resources....4-47

Impacts on Motorized Recreation Resources.4-48

Impacts on Production of Bighorn Sheep........4-48

Impacts on Cultural Resources............4-49

Resource Development Alternative
Impacts on Wilderness Values...............4-49

Impacts on Development of Mineral Resources....4-52

Impacts on Motorized Recreation Resources.4-53

Impacts on Production of Bighorn Sheep........4-54

Impacts on Cultural Resources............4-54

Delamar Mountains WSA (NV-050-0177)
Proposed Action
Impacts on Wilderness Values...............4-56

Impacts on Development of Mineral Resources....4-57

Impacts on Motorized Recreation Resources.4-57

Impacts on Development of Utilities............4-57

Adverse Impacts which Cannot be Avoided....4-57

Short Term Uses vs. Long Term Productivity....4-57

Irreversible and Irretrievable Commitment of Resources.........4-58

All Wilderness Alternative
Impacts on Wilderness Values...............4-58

Impacts on Development of Mineral Resources....4-58

Impacts on Motorized Recreation Resources.4-59

Impacts on Development of Utilities............4-59

Resource Development Alternative
Impacts on Wilderness Values...............4-59

Impacts on Development of Mineral Resources....4-61

Impacts on Motorized Recreation Resources.4-61

Impacts on Development of Utilities............4-61

Wilderness Accent Alternative
Impacts on Wilderness Values...............4-62

Impacts on Development of Mineral Resources....4-63

Impacts on Motorized Recreation Resources.4-63

Impacts on Development of Utilities............4-64

CHAPTER 5: CONSULTATION, COORDINATION, PUBLIC PARTICIPATION AND LIST OF PREPARERS

Consultation and Coordination..............5-1
EIS Review................5-1
Consistency With Other Plans.....................5-2
Table 5-1................5-3
(Agencies, Organizations and Officials)
Table 5-2 5-11
(Index of Comment Letters)
Comment Letters and Responses................5-17
List of Preparers.......5-167

APPENDIX

REFERENCES

CHAPTER ONE

Introduction

CHAPTER ONE

INTRODUCTION, PLANNING AND STUDY PROCESS

PURPOSE

The purpose of the Proposed Action in four of the Wilderness Study Areas (WSAs) examined in this environmental impact statement, as the Wilderness Act states, "Is to secure for the American people of present and future generations the benefits of an enduring resource of wilderness." To this end, the Proposed Action recommends managing and preserving the wilderness characteristics on 332,870 acres in four WSAs, and managing 255,553 acres for uses other than wilderness. This document analyzes the potential impacts of designating or not designating as wilderness, all or portions of five WSAs in southern Lincoln and northern Clark Counties, Nevada, and identities reasonable alternatives. The Proposed Action represents the Bureau of Land Management's (BLM's) wilderness recommendations for these five WSAs as they were developed through the Bureau's planning system.

NEED

The Caliente Wilderness EIS is being prepared in response to Section 603 of the Federal Land Policy and Management Act (FLPMA) of October 21, 1976. FLPMA requires the BLM to inventory, study and then report to Congress through the Secretary of the Interior and the President, the public lands suitable and recommended for inclusion in the National Wilderness Preservation System (NWPS). The need met by this planning process is the selection and establishment of a resource of wilderness values for inclusion in a nationwide system, the National Wilderness Preservation System (NWPS), for preservation of lands for future generations to enjoy those values. Suitability recommendations are to be reported to the President by October 21, 1991 and to Congress by October 21, 1993.

Areas can be designated wilderness only by an Act of Congress. If designated wilderness, an area would be managed in accordance with the Wilderness Act of 1964 and the BLM's Wilderness Management Policy, dated September, 1981.

Table 1-1

LIST OF WILDERNESS STUDY AREAS

WSA Name	Number	Acreage	County
South Pahroc Range	NV-050-0132	28,600	Lincoln
Clover Mountains (Grapevine Spring)	NV-050-0139	84,935	Lincoln
Meadow Valley Range	NV-050-0156	185,744	Lincoln/Clark
Mormon Mountains	NV-050-0161	162,887	Lincoln/Clark
Delamar Mountains	NV-050-0177	126,257	Lincoln

The WSAs are located in the BLM's Las Vegas District in southern Nevada in the Caliente Resource Area with small portions of two located in Stateline Resource Area. The Location Map shows their relative location within the State of Nevada.

WILDERNESS REVIEW

Inventory

The inventory phase identified areas with wilderness characteristics, as defined in the Wilderness Act of 1964, and designated them as WSAs. Guidelines for conducting the inventory phase were set forth primarily in the BLM's "Wilderness Inventory Handbook" of 1978. Inventory phases for these five WSAs were completed in 1979 and 1980.

Areas studied under the planning system for wilderness were evaluated for the following features:

These key factors were considered when roadless areas with wilderness characteristics were identified:

> Size: The area must have at least 5,000 contiguous roadless acres of public land.
>
> Naturalness: Human imprints must be substantially unnoticeable.
>
> Outstanding opportunities: The area must offer either an outstanding opportunity for solitude or an outstanding opportunity for primitive and unconfined recreation.

During wilderness inventory, the BLM also considered the extent to which each of the following wilderness values were present:

> Special Features: Ecological, geological, or other features of scientific, educational, scenic or historical value.

Study

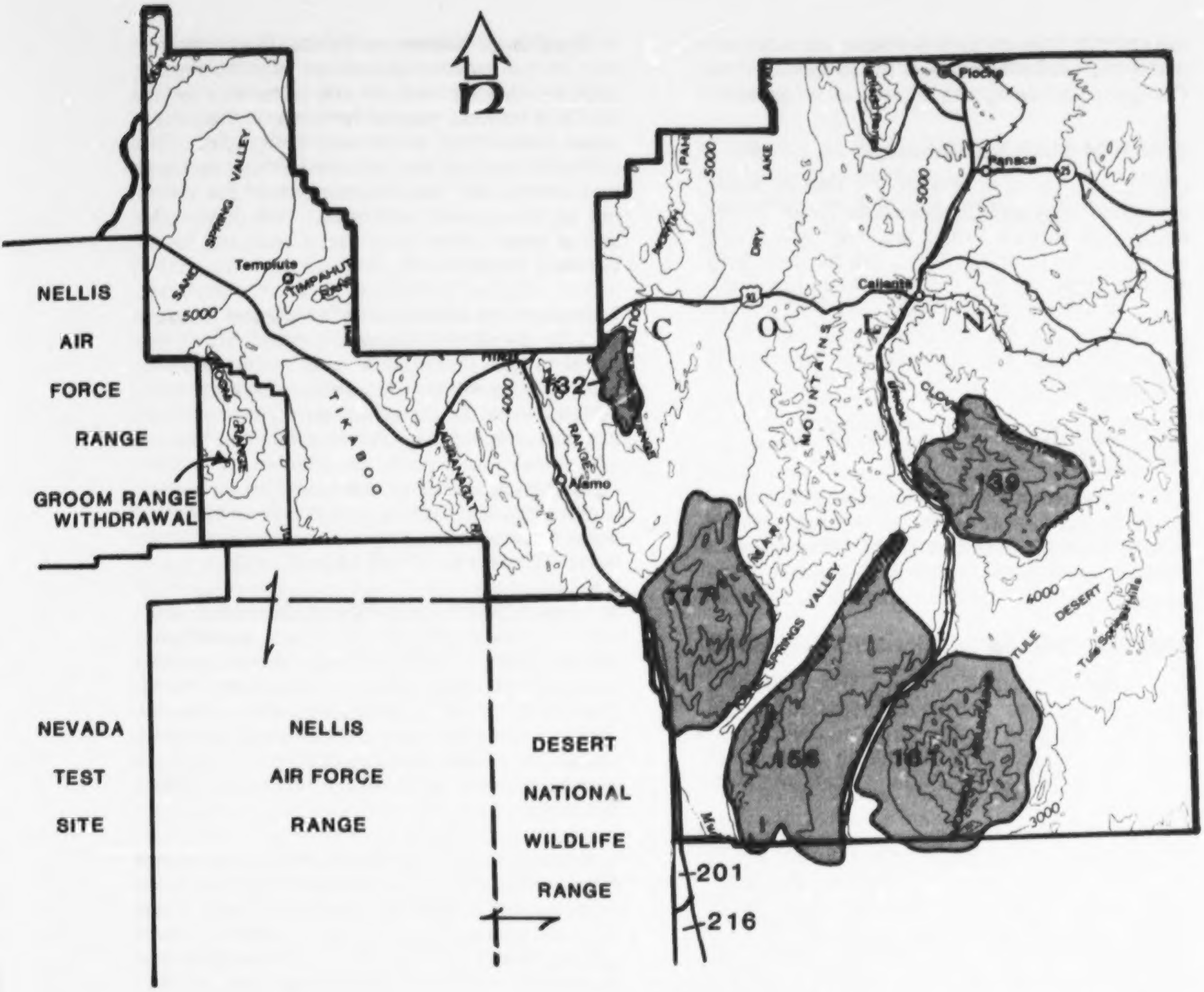
During the study phase, the BLM determined through careful analysis which study areas would be recommended as suitable for wilderness designation and which would not. By careful examination of each WSA, utilizing the preceding criteria, recommendations for the five areas were made through the BLM's multiple use resource planning. In the case of this study, the Caliente Management Framework Plan is being amended, using the newer Resource Management Plan process. The BLM's planning regulations and its final wilderness study policy guided the study process (43 CFR 1600).

In evaluating each WSA, the BLM also considered whether the area was capable of being effectively managed to preserve its wilderness character over the long term.

The study phase produced a draft environmental impact statement (DEIS) and this final wilderness EIS which address the completed results of the study and environmental analysis phase. Public review of the DEIS ended January 2, 1985.

Reporting

All WSA recommendations concerning designation or non-designation as wilderness will be reported through the Director of the BLM to the Secretary of the Interior, and through the Secre-


NELLIS
AIR
FORCE
RANGE
GROOM RANGE WITHDRAWAL
NEVADA
TEST
SITE
NELLIS
AIR FORCE
RANGE
DESERT
NATIONAL
WILDLIFE
RANGE
SAND SPRING VALLEY
Tempiute
TIMPAHUTE RANGE
5000
TIKABOO
4000
Alamo
RANGE
132
177
156
161
139
Pioche
Panaca
Caliente
NORTH PAHROC
DRY LAKE
MOUNTAINS
DELAMAR
KANE SPRINGS VALLEY
CLOVER
TULE DESERT
3000
201
216
L C O L N

■ WILDERNESS STUDY AREAS

050-132 SOUTH PAHROC RANGE
050-139 CLOVER MOUNTAINS
050-156 MEADOW VALLEY RANGE
050-161 MORMON MOUNTAINS
050-177 DELAMAR MOUNTAINS
050-201 FISH AND WILDLIFE #1
050-216 FISH AND WILDLIFE #2

CALIENTE RESOURCE AREA
Location Map

WILDERNESS STUDY AREAS

tary of the Interior to the President, who will make his recommendation to Congress. Only Congress can designate an area as wilderness.

INTERIM MANAGEMENT

Until Congress acts, the BLM's **Interim Management Policy and Guidelines for Lands Under Wilderness Review**, (1979; rev. 1983 and 1987), serves as the principal document for managing the five WSAs in the Caliente Resource Area. The goal of the interim management policy (IMP) is to ensure that the wilderness qualities inherent in each WSA are unchanged at the time that Congress makes its decisions.

MANAGEMENT OF DESIGNATED WILDERNESS AREAS

Any WSAs which are designated as Wilderness Areas by the Congress will be managed by the BLM under 43 CFR Subpart 8560 "Management of Designated Wilderness Areas." Specific management plans will be developed for each area.

ISSUE IDENTIFICATION AND SCOPING

The scoping process for the Caliente Wilderness EIS encompassed issues identified by BLM staff, by the public during normal scoping comment periods and from comments on the draft EIS by the public and by Federal, State and local agencies.

During the inventory stage, several formal public comment periods were held. Periodically, additional public input has arrived and been considered. As the study process progressed into the EIS stage, an issue identification period was held from February 25, 1983, to April 4, 1983. A large mailing and news release announced this stage. An open house was held in Caliente the week of March 7, 1983.

Scoping was opened to the public between June 15, 1983, and August 1, 1983. It too was announced through a large mailing and news releases. Open houses were held in Caliente, June 29, 1983, and June 30, 1983, in Las Vegas. A briefing and discussion of issues and alternatives was held July 29, 1983, for State agencies through the auspices of the Nevada State Clearinghouse.

ISSUES IDENTIFIED FOR ANALYSIS

The following is the list of environmental issues identified for analysis in the EIS. The issues apply to each WSA as noted.

1. **Impacts on Wilderness Values.** The preservation of the wilderness values of naturalness, opportunities for solitude and primitive recreation and various special features of the WSAs could result from wilderness designation. The same values may be damaged or lost by uses and actions that would occur should the WSAs not be designated wilderness. The consideration of these effects is an issue analyzed for all WSAs in this EIS.

2. **Impacts on Development of Mineral Resources.** Wilderness designation could affect the development of potential and known mineral resources by withdrawing designated lands from mineral entry. Development of mineral resources on valid mining claims within designated wilderness areas could be affected by wilderness management restrictions. The impact of wilderness designation on the development of potential and known mineral resources is an issue analyzed for all WSAs in this EIS.

3. **Impacts on Motorized Recreational Use.** Wilderness designation would affect recreational use by a minor shift of this use from wilderness designated lands to similar nearby public lands. The impact of wilderness designation on motorized recreational use is an issue analyzed in the Clover Mountains, Meadow Valley Range, Mormon Mountains, and Delamar Mountains WSAs in this EIS.

4. **Impacts on Grazing Facility Maintenance and Construction.** Wilderness designation, as is clear from the Wilderness Act and its hearings, is not intended to affect grazing levels. Therefore, future grazing levels and maintenance of facilities are expected to continue similarly to the past. Any adjustments would be in response to the needs of the resource as in the past. Wilderness designation could affect livestock operations through precluding some planned range developments. The impact of wilderness designation on the construction and maintenance of these facilities is an issue analyzed for the Meadow Valley Range WSA in this EIS.

5. **Impacts on Increased Production of Deer and Bighorn Sheep as Related to Vegetation Manipulation.** Vegetation alteration projects are proposed in the Caliente MFP in the Clover and Mormon Mountains WSAs. Wilderness designation could affect some of the available options for this wildlife habitat manipulation through limiting the methodology used to achieve the alteration and through requiring the use of native species in reseeding. This, in turn, could affect the amount of increase in numbers of big game

animals produced. The impact of wilderness designation on the potential increase in numbers of deer in the Clover Mountains and of bighorn sheep produced in the Mormon Mountains WSAs are issues for analysis in this EIS because consumptive wildlife uses are important in the region. These issues are analyzed for the Clover and Mormon Mountains WSAs.

6. **Impacts on Cultural Resources.** Cultural resources which may be potentially eligible for the National Register of Historic Places have been identified in the Mormon Mountains WSA. All of the other WSAs have sites which appear to be typical of the Great Basin. Therefore, the impact on potentially eligible sites in the Mormon Mountains WSA is an issue analyzed in this EIS.

7. **Impacts on Water Quality in the Clover Mountains WSA.** The issue of how water quantity and/or quality would be affected by wilderness designation in each of the WSAs was identified. Because designation would preclude many activities that may impact water resources, this issue is analyzed in this EIS. However, the present major factor affecting water quality in the Clover Mountains appears to be grazing by domestic livestock and wild horses. Wilderness designation, per se, will not trigger a change in this factor. A study is underway which will better characterize the situation there and plan for its improvement. This issue is analyzed only for the Clover Mountains WSA as it is the only one having any water present which could potentially be affected. The other WSAs are either devoid of water or have only very isolated, minor seeps.

8. **Impacts on the Development of Utilities.** Wilderness designation could affect the use of land for utility corridors. The route along Highway 93 is the natural course for north-south interregional utilities which tie into either Las Vegas, or the Hoover Dam facilities to follow, and consequently, has received considerable attention from potential users and land managers. The Delamar Mountains WSA lies astride this route from Highway 93, easterly. To the west and east, a series of withdrawals and other WSAs severely restrict alternative routes through or to southern Nevada. Therefore, the impact of wilderness designation on land use for utilities in the Delamar Mountains WSA is an issue analyzed in this EIS.

ISSUES WHICH WERE NOT ANALYZED

The following issues were identified in scoping but were not selected for detailed analysis in the EIS because their significance to the decision process was low or not relevant. The reasons for setting aside each of the issues are discussed below:

1. **Impacts on Bighorn Sheep Reintroductions and Management.** Additional concerns regarding wildlife were raised during scoping. These concerns included reestablishment of desert bighorn sheep and construction of water developments to support new and existing populations. The **Wilderness Management Policy** provides for both the reestablishment of native species and development of waters. Although there may be some restrictions placed on the way waters are developed and subsequent maintenance activities as a result of wilderness designation, such strictures would not significantly affect reestablishment and water developments. Because reintroductions are permitted and may augment wilderness values and some water development is permitted, there is no conflict. Therefore, this issue was not analyzed in this EIS.

2. **Impacts on Wild Horse and Burro Management.** This issue was identified several times during the development of the EIS. In particular, the Nevada Department of Wildlife voiced concerns that wilderness designation may not allow effective management of wild horses and burros. The **Wilderness Management Policy** specifically allows for the management of viable herds of wild horses and burros in wilderness areas and doesn't significantly restrict management alternatives. Less than three percent of the total wild horse and burro populations in the Caliente Resource Area occur within the Meadow Valley Range, Mormon Mountains and Clover Mountains WSAs. The other WSAs have none. Designation of these WSAs would not have a significant impact on the animals nor on management of their numbers. Since there is little effect on wild horse management, this issue was not analyzed in this EIS.

3. **Impacts on Military Overflights.** During EIS development, the U.S. Air Force raised concerns pertaining to the effect wilderness designation would have on low-level military overflights. The **Wilderness Management Policy** does not prohibit low-level military overflights, therefore, this issue was not analyzed in this EIS.

4. **Impacts on Electronic Site Availability.** Issues were raised pertaining to the impact of wilderness designation on site availability for two types of facilities on public lands in wilderness areas. These included both electronic packages

and communication sites. The electronic packages are used to acquire military aircraft locational and performance data and transmit same to a remote receiver for training evaluation The Air Force did plan to locate some portable electronic packages in the Mormon, Meadow Valley Range and Clover Mountains WSAs but alternative locations were found to accommodate the system. There are no applications on file and no interest has been expressed for communications sites in any of the WSAs. Adequate sites, both current and potential, are found outside the WSAs and Bureau Manual guidance (2860.11A) encourages the use of existing sites for new facilities. Since there are adequate existing sites outside the WSAs, this issue was not analyzed in this EIS.

5. **Impacts on Threatened and Endangered Species.** Wildlife and vegetation inventories and coordination with the U.S. Fish and Wildlife Service did not identify any threatened or endangered species in the WSAs. Other sources report possible occasional transient peregrine falcons in the Clover Mountains. Because designation or non-designation would not affect any T&E species, this issue was not analyzed in this EIS.

6. **Impacts on Air Quality Classification.** The State of Nevada noted that an existing and a proposed power plant could affect air quality in two WSAs. Concerns were also raised by others regarding the interaction between wilderness designation and air quality classification. The **Wilderness Management Policy** states that the Bureau will manage all wilderness areas to comply with the existing air quality classification for that specific area, so wilderness designation or nondesignation would not cause the the air quality classification to change. Regardless of designation, it appears some air quality changes may occur in the WSAs due to power plants. Because the designation or non-designation of WSAs as wilderness areas would not change either air quality or air quality designations, this issue was not analyzed in this EIS.

FORMULATION OF ALTERNATIVES

Proposed Action

Development of the Proposed Action in each WSA is guided by requirements of the Bureau's Planning Regulations, 43 CFR, part 1600. The BLM's **Wilderness Study Policy** (published February 3, 1982, in the **Federal Register**) supplements the planning regulations by providing the specific factors to be considered in developing suitability recommendations.

The Proposed Action for the draft EIS was evolved using alternatives developed by an interdisciplinary team from which management chose its final recommendations. Consideration was given to the results of the impact analysis for the other alternatives and to public input during the inventory and preceding EIS stages. Relative wilderness values and potential conflicts with other resources were weighed. Significant conflicts were generally resolved in favor of the resource having the greatest public value.

The Proposed Action differs from that analyzed in the DEIS. Based on a reevaluation of the Mormon Mountains WSA, a different proposed action was selected.

The reevaluation of the Mormon Mountains WSA was the result of review of public comment on the DEIS which pointed out serious potential manageability problems with the boundaries of the proposed action in the DEIS. The Wilderness Accent Alternative for the Mormon Mountains, which was also analyzed in the DEIS, provided for more logical boundaries for this WSA and was selected as the new proposed action. Since the DEIS was circulated, the U.S. Bureau of Mines/USGS Mineral Report on this WSA has been received. This new mineral resource information was considered during the process of reevaluation of the WSA. Although the report indicated a higher confidence level regarding the presence of metallic minerals, it did not indicate the presence of ore-forming processes and consequent economic deposition. Therefore, it was decided that all other known resource values present outweighed the mineral potential and greater public benefits would be derived by recommending the new proposed action.

The Proposed Action for the EIS recommends 332,870 acres as suitable for wilderness designation in four WSAs with the remaining 255,553 acres and a fifth WSA of 126,257 acres as nonsuitable. The nonsuitable acres would be released for uses other than wilderness. Table S-1 provides a breakdown of suitable and nonsuitable acreage by WSA, by alternative.

Alternatives Selected for Analysis

The BLM **Wilderness Study Policy** calls for the formulation and evaluation of alternatives ranging from resource preservation to commodity production. The alternatives assessed in this EIS include: (1) a No Wilderness alternative for each WSA; (2) an All Wilderness alternative for each WSA; (3) a Proposed Action alternative for each WSA; (4) a Resource Development alternative; and (5) a Wilderness Accent alternative.

Of the five alternatives, two are required by policy or regulation. The Wilderness Policy requires All Wilderness and No Wilderness, while NEPA requires the Proposed Action and No Action. In this case, No Action is the same as the No Wilderness alternative. No Action entails a continuation of non-wilderness management actions as outlined in the existing Management Framework Plan. Partial Wilderness is covered using two alternatives which emphasize preservation and development, respectively. Where the criteria used in developing the two partial wilderness alternatives resulted in two very similar configurations within a WSA, the two similar alternatives were considered and analyzed as one alternative to save repetitious analysis. This occurred in three cases. In the South Pahroc Range WSA, the Wilderness Accent alternative and the All Wilderness alternative are identical and the Resource Development alternative and the Proposed Action are very similar. Therefore, both pairs of similar alternatives were combined into two alternatives for analytical purposes. In the Mormon Mountains WSA, the Proposed Action is the same as the Wilderness Accent alternative and these two alternatives were combined for purposes of analysis.

Alternatives were developed utilizing the Caliente Resource Area's MFP, resource specialists' input, technical studies such as the Geology-Energy-Minerals (GEM) Reports, USGS geochemical studies, public needs, opinions, and concerns, and the result of comments on the DEIS. The intent was to develop viable management alternatives while analyzing the effects of various levels of suitability/nonsuitability ranging from All to No Wilderness.

Alternatives Considered But Dropped From Further Analysis

The Division of State Parks suggested two "conceptual" alternatives. These were "an alternative that emphasizes recreational variety and use should be considered. In addition an alternative which emphasizes the enhancement of manageability of the Wilderness Study Areas as wilderness over the long term (Management Alternative) should also be completed. The recommendations in this alternative would consist of combining adjacent WSAs, adjusting boundaries to form more logical management configurations, closing and rehabilitating cherry-stem roads, etc." Maps or detailed descriptions of these alternatives were not supplied. Therefore, the EIS Team considered whether the intent of these suggestions was met in the array of alternatives developed for analysis. They determined that of the two alternatives suggested by the Division of State Parks, all or portions are encompassed within the current alternatives with some exceptions. A "recreational variety emphasis alternative" was not specifically developed for several reasons. Among these reasons, is the fact that the team feels that the recreational menu available in the Las Vegas District appears in all its facets throughout the various alternatives chosen. There is heavy recreational use of public lands in Clark County and less so in Lincoln County. Use in Clark County is more ORV oriented and tends to be less ORV oriented in Lincoln County. Current use in Lincoln County spans the spectrum between ORV intensive use and primitive recreational pursuits. Portions of WSAs presently accessible from existing boundary roads, cherrystem roads and ways will continue to be available in the Resource Development and No Wilderness alternatives, thus serving vehicle oriented recreation. In the All Wilderness and Wilderness Accent alternatives, primitive recreation is emphasized. The Wilderness Accent alternative allows ORV use in areas where it is likely to occur regardless of designation, while reserving more remote areas for primitive recreation. By choosing among the various alternatives available for each WSA, a recreation variety emphasis alternative can be created and it is not felt that such a specifically created alternative would differ substantially from one derived by a combination of the alternatives analyzed in this EIS. The Wilderness Accent alternative also effectively creates a recreational variety emphasis alternative in that it favors primitive recreation values except where manageability over the long term is a concern. Manageability in most cases is a problem with ORV accessibility which means that this recreational pursuit can occur on the nonsuitable portions of the WSAs. Closing roads was not considered because no roads that were susceptible to closure (suitable terrain) were pivotal in developing suitable/nonsuitable recommendations.

Combining adjacent WSAs was considered but not done. Only the Mormon Mountains and Meadow Valley Range WSAs are separated by narrow linear features and would thus be amenable to combination. In their case, the separation is due to the Union Pacific railroad, its access road, railroad utility lines, and some small areas of private property. While virtually contiguous in the All Wilderness and Wilderness Accent alternatives, it would be impractical to impossible to combine the two because of the existing rights-of-way and improvements thereto.

The other actions requested for consideration by the Division are: Manageability over the long term, and adjusting boundaries to form more logical management configurations. Manageability factors will come at a later stage in the consideration of the WSAs. Boundary adjustments were a major emphasis in formulation of the Wilderness Accent alternative.

The EIS Team carefully considered all suggestions for other alternatives, Numerous small adjustments can be made to the alternatives analyzed in this EIS, but none appears capable of substantially altering the outcome of the analysis or creating increased clarity for the decision maker. As can be seen from Table S-1 percentages, the analyzed alternatives present a reasonable range of options. In general, various segments of the public and public agencies supported the array of alternatives or specific alternatives which met their concerns. Therefore, the alternatives as originally proposed in scoping and in the DEIS have been carried into the EIS analysis with minor alterations due to new information.

CHAPTER TWO

Alternatives

CHAPTER 2

PROPOSED ACTION AND ALTERNATIVES

Since the pattern of future actions within the WSAs cannot be predicted with certainty, assumptions were made to allow the analysis of impacts under the various alternatives. These assumptions are the basis of the impacts identified in this EIS. Although some were drawn from management plans, they are not management plans or proposals, but represent feasible patterns of activities which may occur under the alternatives analyzed.

SOUTH PAHROC RANGE WSA (NV-050-0132) (28,600 acres)

Proposed Action

(Partial Wilderness Alternative)
(Suitable: 28,395 acres, Nonsuitable: 205 acres)

Mineral Resource Actions

Subject to valid existing rights, 28,395 acres of the South Pahroc Range WSA recommended as suitable would be withdrawn from all forms of appropriation under the mineral leasing and mining laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations. The 205 acres situated along the WSA's northeastern boundary recommended as nonsuitable, would remain open to appropriation under the mineral leasing and mining laws. There are mining claims within the 205 acre area.

Locatable Minerals

In the area recommended as suitable, no mineral development is expected, and the area would be withdrawn from appropriation under the mining laws.

In the area recommended as nonsuitable, perlite resources exist in significant quantities along the far northeastern flank of the WSA but with minor market demand. These deposits occur adjacent to the currently-mined Paramount Perlite Company deposit which is operated sporadically as orders are received. Claims totaling approximately 170 acres have been filed on these deposits along the northeast in the area recommended as nonsuitable. It is assumed that a Plan of Operations would be filed and that development would eventually take place on the undeveloped claims in a manner similar to the existing operation. The existing mine consists of a cleared and leveled equipment storage area, some small open pits and an underground operation. Development would require; approximately one mile of road, one-third of which would be within the WSA; two to three acres cleared and leveled for equipment storage, and twenty to thirty acres of open pit associated with mine portal development.

Leasable Minerals

Although adjacent lowlands are leased, no leases exist in the uplands. Due to the demonstrated lack of interest, thick igneous section and the extremely difficult terrain present in the WSA, it is not anticipated that any oil and gas exploration would occur.

Salable Minerals

Sand and gravel resources exist in significant quantities within alluvial fan areas but without significant market demand; therefore, no development is anticipated.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 28,395 acre portion of the WSA recommended as suitable would be closed to recreational ORV use. No cherrystem roads exist and a 1.1 mile way extending from the north boundary would be closed. Since little vehicular access currently exists, closing this route would have a minimal effect on motorized recreational usage, reducing it from fifty visitor-days annually, to zero.

The area recommended as nonsuitable is currently inaccessible to vehicles except for the lowermost slopes which are fans. These fans are not currently used by vehicles and the situation would remain the same, as the mine access road, which is expected to be eventually constructed, would not likely be left open to the public.

Other Recreation

In the area recommended as suitable, non-motorized recreational pursuits such as hunting, dayhiking, rock scrambling, backpacking, nature study and photography would be managed. Bird hunting does, and would continue to, occur along the less rugged portions of the flanks. Hunting use is currently estimated at thirty hunter-days annually and is estimated to increase to fifty hunter-days annually in the foreseeable future. Visitation is currently low and expected to grow slowly. Estimated non-motorized recreational use that would be accommodated under wilderness management is 250 visitor-days annually. Visitation would increase moderately from the current estimated annual use of forty visitor-days, due to the area's increased visibility with designation.

The 205-acre nonsuitable area would support very limited non-motorized recreational activities and similarly limited bighorn sheep hunting. The current annual estimated non-motorized recreation use is zero and would rise to ten visitor-days. Hunting use would rise from the current estimated annual use of ten hunter-days to twenty hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The portion of this WSA recommended as suitable contains parts of two allotments which produce a pro-rated 5,542 AUMs. The area recommended as nonsuitable produces a pro-rated 100 AUMs. No new range developments have been identified through coordinated resource management planning (CRMP) that would affect the WSA.

Wildlife Management Actions

Bighorn sheep have been reintroduced to this range. There are no existing wildlife developments within the WSA and none would be necessary to augment the habitat.

All Wilderness Alternative (Also the Wilderness Accent Alternative)

(Suitable: 28,600 acres, Nonsuitable: 0 acres)

Mineral Resource Actions

Subject to valid existing rights, 28,600 acres of the South Pahroc Range recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and there would be no surface occupancy under the mineral leasing laws.. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operations for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

Subject to valid existing rights 28,600 acres would be withdrawn from all forms of appropriation under the mining laws. There are approximately 170 acres of mining claims in the far northeastern section of the area recommended as suitable. In this area, perlite resources exist in significant quantities, but with minor market demand. These deposits occur adjacent to the currently-mined Paramount Perlite Company deposit which is operated sporadically as orders are received. It is assumed that a Plan of Operations would be filed and that development would eventually take place on the undeveloped claims in a manner similar to the existing operation. The existing mine consists of a cleared and leveled equipment storage area, some small open pits and an underground operation. Development would require; approximately one mile of road, one-third of which would be within the WSA; two to three acres cleared and leveled for equipment storage, and twenty to thirty acres of open pit associated with mine portal development. Estimated total disturbance would be thirty-three acres.

Leasable Minerals

Although adjacent lowlands are leased, no leases exist in the uplands. Due to the demonstrated lack of interest, thick igneous section and the extremely difficult terrain present in the WSA, it is not anticipated that any oil and gas exploration would occur.

Salable Minerals

No permits would be issued.

Recreation Management Actions

Recreational Off-Road Vehicle Use

All 28,600 acres of the WSA recommended as suitable would be closed to recreational ORV use. No cherrystem roads exist and a 1.1 mile way extending from the north boundary would be closed. Since little vehicular access currently exists, closing this route would have a minimal effect on motorized recreational usage, reducing it from an estimated fifty, to zero visitor-days annually.

Other Recreation

Non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study and photography would be managed in the 28,600-acre area recommended as suitable. Bird hunting does, and would continue to occur along the less rugged portions of the flanks. Hunting use is currently estimated at forty hunter-days annually and would increase to fifty hunter-days in the forseeable future. Visitation is currently low and expected to grow slowly. The estimated current annual non-motorized recreation use is 40 visitor-days and would rise to 260 visitor-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The WSA contains parts of two allotments which produce an estimated 5,642 AUMs. No new range developments have been identified through coordinated resource management planning (CRMP) that would affect the WSA.

Wildlife Management Actions

There are no existing wildlife developments within the WSA. Bighorn sheep have been reintroduced to this range and no developments would be necessary to augment the habitat.

No Wilderness Alternative

(Suitable: 0 acres, Nonsuitable 28,600 acres)

Mineral Resource Actions

The 28,600 acres of the South Pahroc Range WSA recommended as nonsuitable for wilderness designation would remain open to all forms of appropriation under the mineral leasing and mining laws.

Locatable Minerals

Perlite resources exist in significant quantities along the far northeastern flank of the WSA but with minor market demand. These deposits occur adjacent to the currently-mined Paramount Perlite Company deposit which is operated sporadically as orders are received and claims totaling approximately 170 acres have been filed on them. It is assumed that a Plan of Operations would be filed and that development would eventually take place on the undeveloped claims in a manner similar to the existing operation. The existing mine consists of a cleared and leveled equipment storage area, some small open pits and an underground operation. Development would require; approximately one mile of road, one-third of which would be within the WSA; two to three acres cleared and leveled for equipment storage, and twenty to thirty acres of open pit associated with mine portal development. Total area disturbed would be thirty-three acres. Some exploration may occur along the east-central flanks where additional perlite is thought to be present, resulting in an additional disturbance of fifteen acres.

Leasable Minerals

Although adjacent lowlands are leased, no leases exist in the uplands. Due to the demonstrated lack of interest, thick igneous section and the extremely difficult terrain present in the WSA, it is not anticipated that any oil and gas exploration would occur.

Salable Minerals

Sand and gravel resources exist in significant quantities within alluvial fan areas but without significant market demand, therefore no development is anticipated.

Recreation Management Actions

Recreational Off-Road Vehicle Use

All 28,600 acres of the WSA would remain open for recreational ORV use unless closed or restricted for other reasons. Practically speaking, the area is inaccessible to vehicles, since only an estimated 3,000 to 4,000 acres are flat and smooth enough to be driven on.

Approximately two to three miles of roads would be built in conjunction with exploration and development for perlite. These roads would facilitate motorized recreation access to points along the base of the eastern escarpment, primarily for hunting. Due to the terrain features and lack of economic incentives, additional road or way development inside this WSA is very unlikely. Current motorized recreational use of fifty visitor-days would rise to seventy-five annually.

Other Recreation

The major use of the area would continue to be bird and deer hunting along the flanks, with future bighorn sheep hunting higher in the WSA. Non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study and photography would be the dominant uses. These would grow slowly as the population of the Las Vegas area expands. The current estimated non-motorized use is forty visitor-days and would increase to one hundred visitor-days annually. Hunting is estimated at forty hunter-days annually and would rise to one hundred hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The WSA contains parts of two allotments which produce a pro-rated 5,642 AUMs annually from the WSA portion. No new range developments have been identified through CRMP that would affect the WSA. Vegetation manipulation projects would only be feasible on some of the bordering small bajadas.

Wildlife Management Actions

There are no existing wildlife developments within the WSA. Bighorn sheep have been reintroduced to this range and no developments would be necessary to augment the habitat.

Lands

The Air Force has indicated a past interest in putting small portable electronic facilities in the South Pahroc Range. Under this alternative, two of these would be installed and serviced by helicopter.

Resource Development Alternative (Partial Wilderness Alternatives)

(Suitable: 25,775 acres, Nonsuitable: 2,825 acres)

This alternative is the same as the Proposed Action except that an estimated additional 2,620 acres containing potential perlite reserves in the WSA extending south of the Paramount Perlite Mine are recommended as nonsuitable. Because the effects of this alternative are essentially the same as the Proposed Action, this alternative will not be analyzed further.

TABLE 2-1

SUMMARY OF IMPACTS
SOUTH PAHROC RANGE WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	NO WILDERNESS
Impacts on Wilderness Values	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 28,395 acres recommended as suitable. These values would be reduced or lost on 30 of 205 acres recommended as non-suitable.	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained on 28,600 acres recommended as suitable.	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained on eighty percent (22,880 acres) of the WSA.
Impacts on Development of Mineral Resources	Perlite mining would continue on deposits north of the existing mine but potential deposits to the south could not be explored or exploited.	Perlite mining would continue on deposits north of the existing mine but potential perlite deposits to the south could not be explored or developed.	Perlite mining would continue on deposits north of the existing mine. Exploration for perlite would occur south of the mine.

CLOVER MOUNTAINS WSA (NV-050-0139) (84,935 acres)

Proposed Action

(Partial Wilderness Alternative)

(Suitable: 84,165 acres, Nonsuitable: 770 acres)

Mineral Resource Actions

Subject to valid existing rights, 84,165 acres of the Clover Mountains WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operations filed would be examined to determine validity. Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations. The 710 acres situated along the WSA's northwestern boundary and 60 acres located in a narrow strip along Meadow Valley Wash, recommended as nonsuitable, would remain open to appropriation under the laws.

Locatable Minerals

There are no mining claims filed within the area recommended as suitable and no activity is anticipated.

It is anticipated exploration would continue to take place around the Pennsylvania Mining district and would extend eastward into the WSA in the portion which is recommended as nonsuitable in this alternative. The existing mining claims are within the 710 acre area. Exploration activities in the area would include claim staking, access construction, trenching, digging prospect pits and exploratory drilling. Total disturbance from these activities is limited to the area recommended as nonsuitable and is not expected to exceed thirty acres. Development of working mines is not envisioned since it is believed mineralization does not occur in sufficient quantity and/or quality to be economic.

Leasable Minerals

The entire WSA is leased for oil and gas, post-FLPMA. Despite the abundance of leases, exploration or development are not foreseen because of the WSA's volcanic cover, unknown presence of reservoir rock, high costs associated with exploration and drilling, its location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

Sand and gravel resources exist in alluvial fans and washes located in the WSA, but with minor demand, in most cases, because of their remoteness from markets. Consequently, development or exploration for the bulk of this resource is not expected. However, for use by the railroad, county or local residents, at least two sand and gravel operations would develop along Meadow Valley Wash in the area recommended as nonsuitable. Total disturbance would not exceed twenty acres.

Recreation Management Actions

Recreational Off Road Vehicle Use

The 84,165 acre portion of the WSA recommended as suitable would be closed to recreational ORV use. Occasional access is obtained up the lower three to four miles of Cottonwood Creek and this would be precluded. Since little vehicular access currently exists, closing this route would have a minimal effect on motorized recreational usage, reducing it to zero from an estimated ten visitor-days annually. Unless roads are constructed, most of the WSA would remain inaccessible and largely unused by ORVs.

In the area recommended as nonsuitable, there would be a minor amount of access developed in conjunction with mining exploration on the northwest, Approximately two to three miles of low standard roads would be developed, resulting in an estimated twenty-five visitor-days of motorized recreational use. Activities in the narrow strip bordering the road and railroad along Meadow Valley Wash would remain the same as at present, with parking and occasional short walks to the base of the cliffs and up the draws a short distance. The estimated current annual recreational ORV use of twenty-five visitor-days would rise to fifty visitor-days in the foreseeable future.

Other Recreation

In the area recommended as suitable, non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study, photography and horseback riding would occur on 84,165 acres. Hunting use would be mostly from horseback as presently, and is estimated at sixty hunter-days annually and is expected to increase to seventy hunter-days annually in the foreseeable future. With the WSA's relative accessibility from boundary roads, attractiveness, vegetative diversity and water, non-motorized use would grow fairly strongly from the current estimated 100 visitor-days to an estimated 625 visitor-days annually.

In the area recommended as nonsuitable, non-motorized recreation would continue to be light, as presently, at an estimated level of six to ten visitor-days annually. Estimated annual hunting use would rise from the current level of thirty hunter-days to fifty hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The area recommended as suitable contains parts of five allotments which produce a prorated total of 1,962 AUMs. All are actively used and all ranching access is accomplished on foot or horseback, as no useable roads are available.

Existing developments include: one-half mile of fence between Ash and Fife Creeks, one and one-third mile of fence extending southwesterly from south of Fife Spring, a cattle exclosure at Quaking Aspen Spring, a gap fence at lower Cottonwood Creek, and one developed spring above Sam's Camp. Maintenance of these would continue, using non-impairing methods. A proposed five and one-half miles of fence in the central portion would be built using horse access and which would have to meet wilderness management policy guidelines, Grazing would continue as presently.

Approximately fifteen AUMs are produced in the area recommended as nonsuitable, and there are no projects present or proposed.

Wildlife Management Actions

In the area recommended as suitable, there is an exclosure at Ouaking Aspen Spring which would be maintained. Fenced exclosures would be built to protect the source at Oil and Mudhole Springs. These would consist of a combination of barbed and smooth wire fences, utilizing green metal and juniper posts, and enclosing an area of five acres or less each. No projects are proposed in the area recommended as nonsuitable.

Water Resource Management

Wilderness designation would prohibit mining disturbances and the construction of roads except on valid claims. This would prevent surface disturbance and protect water quality at present levels. With the exception of 770 acres recommended as nonsuitable within the Clover Mountains WSA and 600 acres external to the WSA but within the Cottonwood Creek watershed, all of this watershed would be protected from most surface disturbing activities. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

All Wilderness Alternative

(Suitable: 84,935 acres, Nonsuitable: 0 acres)

Mineral Resource Actions

Subject to valid existing rights, 84,935 acres of the Clover Mountains WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

Subject to valid existing rights, 84,935 acres of the Clover Mountains WSA recommended as suitable would be withdrawn from all forms of appropriation under the mining laws. Included is a small area of mining claims totaling 710 acres. If Plans of Operation are filed, validity exams would be conducted on affected claims. However, it is not anticipated that development would take place on any of these.

Leasable Minerals

The entire WSA is leased, post-FLPMA, for oil and gas. Despite the abundance of oil/gas leases, exploration or development is not foreseen because of the WSA's volcanic cover, unknown presence of reservoir rock, high costs associated with exploration and drilling, its location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

No permits would be issued.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 84,935 acres of the WSA recommended as suitable would be closed to recreational ORV use. No cherrystem roads exist but occasional access is obtained up the lower three to four miles of Cottonwood Creek and this would be precluded. Since little vehicular access currently exists, the closure would have minimal effect on motorized useage, reducing it from the current estimated ten visitor-days annually to zero in the foreseeable future.

Other Recreation

Non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study, photography and horseback riding would be managed in the 84,935 acres recommended as suitable. Most hunting would be on horseback, as presently, and is estimated at ninety hunter-days annually. It is expected to increase to one hundred hunter-days annually in the foreseeable future. With the WSA's accessibility from boundary roads, attractiveness, vegetative diversity and water, non-motorized use would grow fairly strongly from the current 100 to an estimated 625 visitor-days annually.

Grazing Facility Maintenance and Construction

The WSA contains parts of five allotments which produce a pro-rated total of 1,977 AUMs. All ranching access would be accomplished on foot or horseback, as no useable roads are available. Existing developments include: one-half mile of fence between Ash and Fife Creeks, one and one-third miles of fence extending southwesterly from south of Fife Spring, a cattle exclosure at Quaking Aspen Spring, a gap fence at lower Cottonwood Creek and one developed spring above Sam's Camp. Maintenance of these would continue, using non-impairing methods. A proposed five and one-half miles of fence in the central portion would be built using horse access and which would have to meet wilderness management policy guidelines. Grazing would continue as presently.

Wildlife Management Actions

An exclosure at Quaking Aspen Spring would be maintained. Fenced exclosures would be built to protect the source at Oil and Mudhole Springs. These would consist of a combination of barbed and smooth wire fences, utilizing green metal and juniper posts, and enclosing an area of five acres or less each.

Water Resource Management

Wilderness designation would prohibit mining disturbances and the construction of roads except on valid claims. This would prelude most surface disturbing activities and protect water quality at present levels. With the exception of 600 acres adjacent to the Pennsylvania Mining District on the northwest side within the watershed, the entire Cottonwood Creek watershed would he protected within designated wilderness. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

No Wilderness Alternative

(Suitable: 0 acres, Nonsuitable: 84,935 acres)

All of the Clover Mountains WSA's 84,935 acres are recommended as nonsuitable for wilderness designation and would be managed for various objectives under the Bureau's planning system.

Mineral Resource Actions

The 84,935 acres of the Clover Mountains WSA recommended as nonsuitable for wilderness designation would remain open to all forms of appropriation under the mineral leasing and mining laws.

Locatable Minerals

It is anticipated exploration would continue to take place around the district and would extend eastward into the WSA. Exploration activities may include claim staking, road building, trenching, prospect pits and drilling. Total disturbance from all these activities to lands within the WSA is not expected to exceed thirty acres. Development of working mines is not envisioned since it is believed mineralization does not occur in sufficient quantity and/or quality to be economic.

Leasable Minerals

The entire WSA is leased, post-FLPMA, for oil and gas. Despite the abundance of leases, exploration or development is not foreseen due to the WSA's volcanic cover, unknown presence of reservoir rock, high costs associated with exploration and drilling, its location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

Sand and gravel resources exist in alluvial fans and washes located in the WSA, but with minor demand, in most cases, because of their remoteness from markets. Development or exploration for the bulk of this resource is not predicted for these reasons. However, for use by the railroad, county or local residents, at least two sand and gravel operations would develop along Meadow Valley Wash. Total disturbance would not exceed twenty acres.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 84,935 acres of the WSA would remain open for recreational ORV use, However, most of the WSA is so inaccessible that, unless roads are constructed, it would remain largely unused by ORVs. Occasional access up the lower end of Cottonwood Creek would continue and some minor penetration around the southern end would occur with motorcycles. Use of the two to three miles of mineral exploration roads expected to be constructed southeast of the Pennsylvania Mining district would expand use slightly on the northwest portion of the WSA. Current use of the area by motorized recreationists is estimated at 35 visitor-days and would reach an estimated 110 visitor-days in the foreseeable future.

Other Recreation

Non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study, photography and horseback riding would continue in most of the area. Hunting use would be mostly from horseback, as presently, and is estimated at ninety visitor-days annually. It is expected to increase to one hundred visitor-days annually in the foreseeable future. With the WSA's relative accessibility from boundary roads, attractiveness, vegetative diversity, and water, non-motorized use would grow from the current estimated one hundred to an estimated two hundred visitor-days annually.

Grazing Facility Maintenance and Construction

The WSA contains parts of five allotments that provide a pro-rated total of 1,977 AUMs. All ranching access would be accomplished on foot or horseback, as no useable roads are available. Grazing use and management would continue as presently. Existing developments include: one-half mile of fence between Ash and Fife Creeks, one and one-third miles of fence extending southwesterly from south of Fife Spring, an exclosure at Quaking Aspen Spring, a gap fence at lower Cottonwood Creek and one developed spring above Sam's Camp. These would be maintained by horseback or vehicle. A proposed five and one-half miles of fence would be constructed using horse access which would have to meet wilderness management standards.

Wildlife Management Actions

There is an exclosure at Quaking Aspen Spring. Mule deer habitat is present and interest has been expressed in converting 13,440 acres of pinyon-juniper stands in southeastern portions of the WSA to a shrub-grassland type more useable to deer. This pinyon-juniper occurs on primarily steep, inaccessible slopes. An estimated fifty percent of the acreage would be burned, or 6,720 acres, producing a mosaic of fingers and islands of unburned pinyon-juniper stands. The burned area would be reseeded with non-local browse species. Fence exclosures would be built to protect the source at Oil and Mudhole Springs. These would consist of a combination of barbed and smooth wire fences, utilizing metal and juniper posts, and enclosing an area of five acres or less each. Construction methods, materials and access would not necessarily be consistent with preservation of wilderness values. Power equipment would be used for access and to the site and to clear and level the area along the fenceline.

Water Resource Management

Nondesignation would permit surface disturbing activities such as mining exploration. This would primarily occur on the northwest side in the upper part of the Cottonwood Creek watershed where an expected 30 acres of disturbance would result.

Resource Development Alternative

(Partial Wilderness Alternative)

(Suitable: 53,090 acres, Nonsuitable: 31,845 acres)

The Resource Development alternative recommends 53,090 acres of the Clover Mountains WSA as suitable and 31,845 acres as nonsuitable for wilderness designation. It excludes all areas of the WSA not in the Pine Creek-Cottonwood Creek drainage, as well as some areas within this drainage.

At the time this alternative was developed, there was a large block of mining claims in the south-central portion of the WSA. The area encompassed in these claims was excluded from the area recommended as suitable. Since that time, these claims have been dropped by the claimant. It also excludes an area of 710 acres of claims located on the WSA's northwestern side.

Mineral Resource Actions

Subject to to valid existing rights, the 53,090 acres of the Clover Mountains WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operations filed would be examined to determine validity. Plans of Operation for the development of claims that exist at the time of designation would be processed in accordance with existing regulations. Mineral exploration and development activities would continue on portions of the nonsuitable area.

Locatable Minerals

Subject to valid existing rights, the area recommended as suitable would be withdrawn from all forms of appropriation under the mining laws.

Exploratory actions are expected in the some of the area recommended as nonsuitable. It is anticipated exploration would continue to take place around the Pennsylvania Mining district on the northwestern side and would extend eastward into the WSA into the area currently encumbered by some 710 acres of mining claims. Exploration activities would include claim staking, access road building, trenching, digging of prospect pits and drilling. Total disturbance from all these activities to lands within the WSA is not expected to exceed 30 acres. Development of working mines is not envisioned since it is believed mineralization does not occur in sufficient quantity and/or quality to be economic. These activities, conducted within the nonsuitable area can occur without respect to preservation of wilderness values.

Leasable Minerals

The entire WSA is leased, post-FLPMA, for oil and gas. Despite the abundance of leases, exploration or development is not foreseen because of the WSA's volcanic cover, unknown presence of reservoir rock, high costs associated with exploration and drilling, its location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

No permits would be issued in the area recommended as suitable.

Sand and gravel resources exist in alluvial fans and washes located primarily in the portion of the WSA recommended as nonsuitable. In most cases, demand is minor because of remoteness from markets. Consequently, development or exploration for the bulk of this resource is not expected. However, at least two sand and gravel operations would develop along Meadow Valley Wash for use by the railroad, county or local citizens in the area recommended nonsuitable. Total disturbance would be no more than twenty acres.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 53,090 acre portion of the WSA recommended as suitable would be closed to recreational ORV use. No cherrystem roads exist and no ways would be closed, Occasional access is obtained up the lower three to four miles of Cottonwood Creek and this would be precluded. Since little vehicular access currently exists, closing this area would have a minimal effect on motorized recreational usage, reducing it from the current estimated ten visitor-days annually to zero in the foreseeable future.

Most of the area recommended as nonsuitable is so inaccessible that, unless roads are constructed, it would remain largely unused by ORVs. The exception is that the southernmost end of the WSA would provide limited access by motorcycle which would provide an additional twenty-five visitor-days annually. The two or three miles of low standard roads expected to result from mining exploration in the northwestern portion of the WSA would increase motorized visitation to an estimated twenty-five visitor-days annually, and use along the Meadow Valley Wash road would rise to fifty visitor-days, for a total estimated future use of one hundred visitor-days annually.

Other Recreation

In the 53,090 acres recommended as suitable, non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study, photography and horseback riding would be managed. With the WSA's relative accessibility from boundary roads, vegetative diversity and water, use would grow fairly strongly from the current estimated eighty to three hundred visitor-days annually in the foreseeable future. Hunting use is currently estimated to be thirty hunter-days annually, and would reach forty hunter-days in the foreseeable future.

The 31,845 acre area recommended as nonsuitable would continue to be used for hunting primarily. Hunting use would be mostly from horseback, as presently, and is estimated at sixty visitor-days annually, It is expected to increase to seventy visitor-days annually in the foreseeable future. Activities in the narrow strip bordering the road and railroad along Meadow Valley Wash would remain the same as at present, with parking and occasional short walks to the base of the cliffs and up the draws a short distance. This use is estimated to be twenty visitor-days annually in the future.

Wildlife Management Actions

In the area recommended as suitable, there are no wildlife developments, Fence exclosures would be built to protect the source at Oil and Mudhole Springs. These would consist of a combination of barbed and smooth wire fences, utilizing metal and juniper posts, and enclosing an area of five acres or less each. Construction methods, materials and access would be consistent with preservation of wilderness values.

In the area recommended as nonsuitable, there are no wildlife developments, There is an exclosure at Quaking Aspen Spring which would be maintained using power equipment. Mule deer habitat is present and interest has been expressed in converting portions of 11,640 acres of pinyon-juniper stands in the southeastern portions of the WSA to a shrub-grassland type. The burned area would be reseeded with non-local browse species. The pinyon-juniper occurs on primarily steep, inaccessible slopes. Approximately fifty percent of the area, or 5,800 acres, would be burned, producing a mosaic of fingers and islands of unburned vegetation.

Grazing Facility Maintenance and Construction

The area of the WSA recommended as suitable contains parts of four allotments that would provide a pro-rated total of 1,397 AUMs. All ranching access would be accomplished on foot or horseback as no useable roads are available, Grazing use and management would continue as presently with use levels based on the carrying capacity and access being obtained by horseback. Existing developments include: One-half mile of fence between Ash and Fife Creeks, one and one-third mile of fence extending southwesterly from south of Fife Spring and a gap fence at lower Cottonwood Creek. These would be maintained by horseback or vehicle. A proposed three and one-half miles of fence would be constructed using horse access which would have to meet wilderness management standards.

In the area recommended as nonsuitable are portions of 5 allotments producing a pro-rated total of 580 AUMs. Existing developments include an exclosure at Quaking Aspen Spring and one developed spring above Sam's Camp. The two mile southern terminus of the fence which begins to the north in the area recommended as suitable would be constructed using horse access.

Water Resource Management

In the area recommended as suitable, wilderness designation would prohibit mining disturbances and the construction of roads except on valid claims, This would prevent surface disturbance and protect water quality at present levels. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

The area recommended as nonsuitable contains four undeveloped perennial springs and eight undeveloped and one developed intermittent spring. Nondesignation would permit surface disturbing activities such as mining exploration. This would primarily occur on the northwestern side in the upper part of the Cottonwood Creek watershed where an expected thirty acres of disturbance would result. The only springs in an area recommended as nonsuitable which may be subjected to mineral exploration in their vicinity are those in the central-south known as Horse Springs. Exploration by legitimate mining companies is not expected, but "hobby" exploration may occur.

Wilderness Accent Alternative

(All Wilderness plus a portion outside WSA boundary)

(Suitable: 86,020 acres, Nonsuitable: 0 acres)

The Wilderness Accent alternative recommends 86,020 acres as suitable for wilderness designation. This includes the entire WSA plus 1,085 acres exterior to the boundary on the northwestern side to extend to the Cottonwood Creek watershed divide.

Mineral Resource Actions

Subject to valid existing rights, the 84,935 acres of the Clover Mountains WSA and an 1,085 acres outside it recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for the development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

Subject to valid existing rights, 86,020 acres of the WSA and 1,085 acres outside the WSA recommended as suitable, would be withdrawn from all forms of appropriation under the mining laws. Validity exams would be conducted on any mining claims existing within the designated area when Plans of Operation are submitted. Mineral exploration and development would cease on the area recommended as suitable unless claims were found to be valid discoveries. If found to be valid, development could proceed subject to reasonable regulation to protect wilderness values.

Areas on the extreme western side of the WSA are considered favorable for the occurrence of metallic mineral deposits in addition to silica sand and chemical grade limestone. It is anticipated exploration would continue to take place around the Pennsylvania Mining district, extending into the area recommended as suitable in this alternative, but outside of the WSA, Exploration would disturb ten acres in this area through trenching and cat road construction. Development of working mines is not envisioned since it is believed mineralization does not occur in sufficient quantity and/or quality to be economic.

Leasable Minerals

The entire WSA is leased, post-FLPMA, for oil and gas. Despite the abundance of leases, exploration or development is not foreseen because of the WSA's volcanic cover, unknown presence of reservoir rock, high costs associated with exploration and drilling, its location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

No permits would be issued.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 86,020 acre portion of the WSA and contiguous area recommended as suitable for wilderness designation would be closed to recreational ORV use. No cherrystem roads exist and no ways would be closed. Occasional access is obtained up the lower three to four miles of Cottonwood Creek and this would be precluded. Since little vehicular access currently exists, closing this route would have a minimal effect on motorized recreational usage, reducing it from an estimated ten, to zero visitor-days annually. Most of the WSA, including the 1,085 acres added exterior to the boundary in this alternative, is so inaccessible that, unless roads are constructed, it would remain largely unused by ORVs.

Other Recreation

Non-motorized recreational pursuits such as hunting, hiking, rock scrambling, backpacking, nature study, photography and horseback riding would be managed in the 86,020 acres recommended as suitable. Hunting use would be mostly from horseback as presently, is estimated at sixty visitor-days annually and is expected to increase to seventy visitor-days annually in the foreseeable future. With the WSA's relative accessibility from boundary roads, attractiveness, vegetative diversity and water, use, in addition to hunting, would grow fairly strongly from the current estimated annual use of 110 visitor-days to 700 visitor-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The area of the WSA recommended as suitable contains parts of five allotments that provide a pro-rated total of 2,000 AUMs. All ranching access would be accomplished on foot or horseback as no useable roads are available. Grazing use and management would continue as presently with use levels based on the carrying capacity and access being obtained by horseback. Existing developments include: One-half mile of fence between Ash and Fife Creeks, one and one-third miles of fence extending southwesterly from south of Fife Spring, a gap fence at lower Cottonwood Creek and one developed spring above Sam's Camp. These would be maintained by horseback. A proposed five and one-half miles of fence in the central portion would be built using horse access and which would have to meet wilderness management policy guidelines.

Wildlife Management Actions

An exclosure at Quaking Aspen Spring would be maintained. Fenced exclosures would be built to protect the source at Oil and Mudhole Springs. These would consist of a combination of barbed and smooth wire fences, utilizing green metal and juniper posts, and enclosing an area of five acres or less each.

Water Resource Management

Wilderness designation would prohibit mining disturbances and the construction of roads except on valid claims. This would prelude most surface disturbing activities and protect water quality at present levels. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

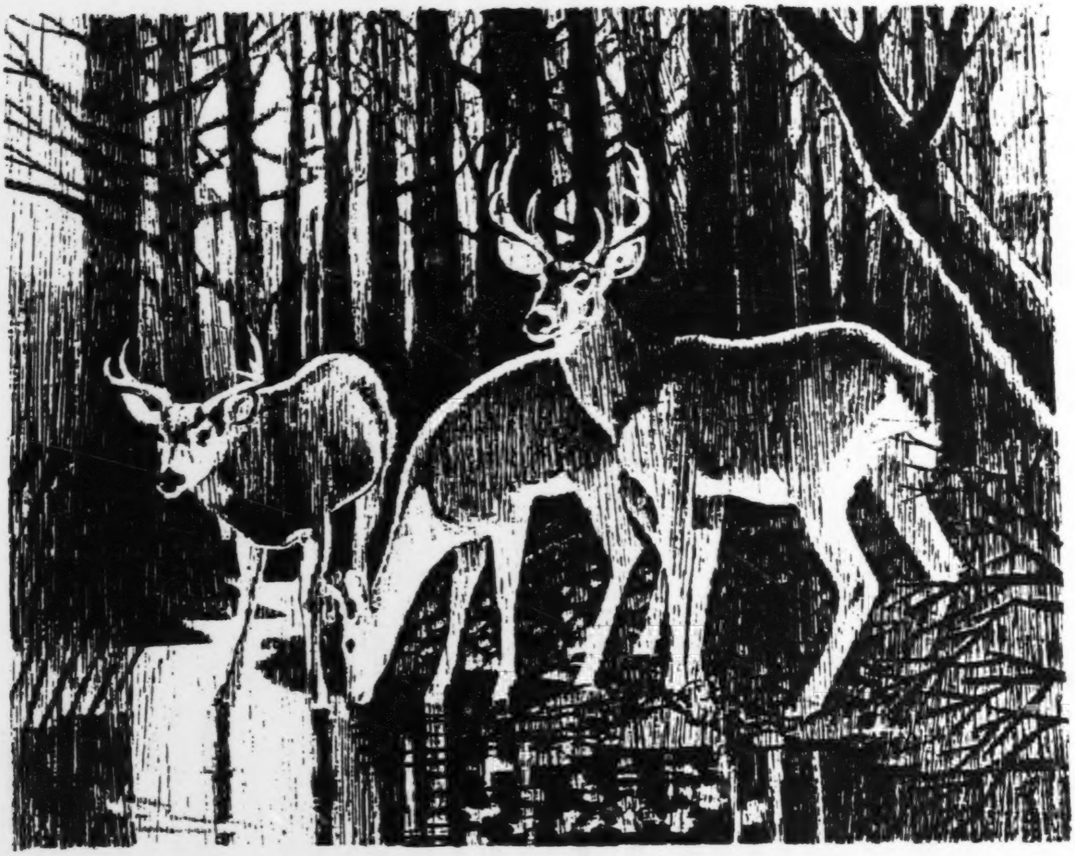


TABLE 2-2

SUMMARY OF IMPACTS
CLOVER MOUNTAINS WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	NO WILDERNESS	RESOURCE DEVELOPMENT	WILDERNESS ACCENT
Impacts on Development of Mineral Resources	Exploration on claims prior to designation would occur but valid discoveries are not anticipated. A minor market for sand and gravel would be met.	Exploration on claims prior to designation would occur but valid discoveries are not anticipated. A minor market for sand and gravel would be satisfied nearby.	Exploration on claims would occur but development is not anticipated. Sand and gravel would be produced along Meadow Valley Wash.	Exploration on claims would occur but development is not anticipated. Sand and gravel would be produced along Meadow Valley Wash.	Exploration on claims prior to designation would occur but valid discoveries are not anticipated. A minor market for sand and gravel would be satisfied nearby.
Impacts on Recreation	Current motorized recreational use of 10 visits annually would be displaced. Primitive recreational use would rise to 625 visits.	Current motorized recreational use of 35 visits annually would be displaced. Primitive recreational use would rise to 625 visits.	Current motorized recreational use would rise to 110 visits annually. Primitive use will rise to 200 visits.	Current motorized recreational use of 10 visits annually would be displaced. Primitive recreational use would rise to 300 visits.	Current motorized recreational use of 35 visits annually would be displaced. Primitive recreational use would rise to 700 visits.
Impacts on Deer Production	Natural fire may increase habitat productivity but habitat manipulation opportunities are more limited.	Natural fire may increase habitat productivity but habitat manipulation opportunities are more limited.	Deer populations would increase by 10 percent.	Deer populations would increase 10 percent.	Natural fire may increase habitat productivity but habitat manipulation opportunities are more limited.
Impacts on Water Quality	Major effect on water quality would continue to be livestock and wild horse grazing. All of the Cottonwood Creek watershed except 5,185 acres would be in designated wilderness.	Major effect on water quality would continue to be livestock and wild horse grazing. All of the Cottonwood Creek watershed except 4,475 acres would be in designated wilderness.	Major effect on water quality would continue to be livestock and wild horse grazing. All of the Cottonwood Creek watershed would remain open to surface disturbance such as minerals exploration.	Major effect on water quality would continue to be livestock and wild horse grazing. Included in wilderness would be 53,090 acres. Excluded are 31,845 acres which would remain open to surface disturbance such as minerals exploration.	Major effect on water quality would continue to be livestock and wild horse grazing. All of the Cottonwood Creek watershed is included in designated wilderness except for 3,330 acres at Fife Spring.

TABLE 2-2

SUMMARY OF IMPACTS
CLOVER MOUNTAINS WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	NO WILDERNESS	RESOURCE DEVELOPMENT	WILDERNESS ACCENT
Impacts on Wilderness Values	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained on 84,165 acres recommended as suitable. Nearly an entire flowing stream's watershed is included. Wilderness values would be lost on 30 of the 770 acres recommended nonsuitable.	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained on 84,935 acres recommended as suitable. Much of an entire flowing stream's watershed is included. In spite of exploration, wilderness values would be retained on 770 acres with mining claims.	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained over most of the WSA. Some reduction of these values would occur along the southern, southeastern and northwestern edges and in lower Cotton wood Creek. These values would be lost on 5,700 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained over 53,090 acres recommended as suitable. These values would be reduced along the southern, southeastern and northwestern edges and lost on 3,200 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and primitive and unconfined recreation would be retained on 86,020 acres recommended as suitable. These values would be lost on 30 acres in the northwest.

MEADOW VALLEY RANGE WSA (NV-050-0156) (185,744 acres)

Proposed Action

(Partial Wilderness Alternative)

(Suitable: 97,180 acres, Nonsuitable: 88,564 acres)

A portion of the Meadow Valley Range WSA, 97,180 acres, is recommended as suitable for wilderness designation. The remaining 88,564 acres, located in the eastern half of the WSA, are recommended as nonsuitable for wilderness designation.

Mineral Resource Actions

Subject to valid existing rights, 97,180 acres of the Meadow Valley Range WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

Mining claims cover about thirty acres along the western edge of the area recommended as suitable. No action is anticipated on that portion of these claims lying within the WSA.

In the area recommended as nonsuitable, there are about 2,200 acres of mining claims and some placer exploration may occur for precious metals in the southeastern portion of the WSA. Exploration would involve the building of one to two miles of road, several backhoe test pits and/or several drill holes, disturbing about five acres total. Development is not foreseen as it is not believed that resources are present in sufficient quantities to be economic. Total surface disturbance should not exceed six acres.

The entire southern half of the WSA, including the southern half of the area recommended as suitable, is thought to have a moderate favorability for the occurrence of chemical and/or metallurgical grade limestone. Additionally, there is a low favorability for occurrence of inferred gypsum, silica sand and perlite. Exploration and/or development, however, are not expected due to the rough terrain, distance to market and availability of exploitable resources which exist closer to population centers and rail lines.

Leasable Minerals

Most of the WSA is leased post-FLPMA for oil and gas. Exploration and/or development are not expected because of the general lack of interest exhibited by the petroleum industry and better potential for reserves in other areas.

Salable Minerals

In the suitable area, no permits would be issued. In the nonsuitable area, it is doubtful that the sand and gravel in the WSA would ever be exploited, as ample reserves exist outside the WSA boundary which are closer to project areas.

Recreation Management Actions

Recreational Off-road Vehicle Use

The 97,180 acres of the WSA recommended as suitable would be closed to recreational ORV use. In the suitable portion, no cherrystem roads and very few ways exist. Approximately two miles of ways, four miles of lower Farrier and seven miles of Wildcat Washes, would be closed off. Since little vehicular access currently exists to the suitable portion, designation would have a minimal effect on motorized recreational usage reducing it from the current estimated seventy-five visitor-days annually, to zero in the foreseeable future.

In the 88,564 acres recommended as nonsuitable, ORV use would continue in the ways and washes of the Vigo Canyon drainage and to Hackberry Spring in Hackberry Canyon. There is a five-and-a-half mile cherrystem road present, but access to it is blocked at its terminus on private land, and weather has damaged it on the public lands portion. This situation is expected to continue. Along the large central bajada, access would be light and intermittent until access is eventually built through the bluffs bordering Meadow Valley Wash. Once access is developed, use would become substantially higher, rising from an estimated 150 visitor-days currently, to 400 visitor-days annually in the foreseeable future.

Other Recreation

Dayhiking, backpacking, rock scrambling, nature study and horseback riding would be managed in the 97,180 acre suitable area. Non-motorized recreation use is currently estimated to be 50 visitor-days and is estimated to rise to 200 visitor-days annually in the foreseeable future. Hunting for deer, bighorn sheep and game birds would continue but without vehicles in areas accessible by vehicle. Hunting use is presently estimated at twenty visitor-days annually and is expected to remain stable in the foreseeable future.

In the 88,564 acre nonsuitable area, dayhiking, backpacking, nature study and horseback riding would continue, mainly in Hackberry Canyon, lower Vigo Canyon and in the southern quarter of the WSA. Hunting for deer and game birds would continue. Hunting use, currently estimated at sixty hunter-days annually, would rise to one hundred hunter-days. Non-motorized recreation use is estimated at 50 visitor-days annually and expected to increase to 150 visitor-days.

Grazing Facility Maintenance and Construction

In the area recommended as suitable, the WSA contains portions of eight allotments which produce a pro-rated 1,725 AUMs plus an ephemeral allocation when available. No cherrystem roads and very few ways and trails penetrate this area. Range facilities consist of a small reservoir, short pipeline and trough in Delamar Allotment, a reservoir and one mile of fence in Grapevine Allotment, corral, and spring development in Henrie Allotment and a spring development in Morrison-Wengert Allotment. These developments would be maintained by accessing the sites by foot and horseback. Developments in the area recommended as nonsuitable include one-half mile of fence, a corral and a spring development. Developments to be built include a reservoir in Morrison-Wengert Allotment and two reservoirs in Breedlove Allotment. The reservoirs would be built using tracked vehicles and would cause substantial surface disturbance totaling fourteen acres. This would impair wilderness values, particularly through the development of access. Existing developments would continue to be maintained as currently, by accessing the site with light trucks and use of power equipment.

Wildlife Management Actions

There is one wildlife development in the WSA, a big game guzzler which lies within the suitable area. This project would continue to be maintained as presently, by a combination of walking and driving.

In the area recommended as nonsuitable, one big game guzzler would be constructed without active concern for use of non-impairing materials, methods, access and locations. This would result in surface disturbance totaling one-half acre, visible tanks and collection apron. Access would be constructed by clearing rocks, ledges and other obstructions from approximately nine miles of washes to permit vehicle passage. Maintenance would be accomplished by vehicular access.

All Wilderness Alternative

(Suitable: 185,744 acres, Nonsuitable: 0 acres)

Mineral Resource Actions

Subject to valid existing rights, 185,744 acres of the Meadow Valley Range WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

Mining claims cover about 30 acres on the western edge and about 2,200 acres on the extreme southeastern corner of the WSA. No action is anticipated on any of these claims.

The entire southern half of the WSA is thought to have moderate favorability for the occurrence of chemical and/or metallurgical grade limestone. Additionally, there is a low favorability for occurrence of inferred gypsum, silica sand and perlite. Interest in exploration and/or development, however, is not expected due to the rough terrain, distance to market and availability of exploitable resources which exist closer to population centers and rail lines. Therefore, no mining claims are expected to be filed.

Leasable Minerals

Most of the WSA is leased post-FLPMA for oil and gas. Exploration and/or development are not expected because of the general lack of interest exhibited by the petroleum industry and better potential for reserves in other areas.

Salable Minerals

No permits would be issued.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The entire 187,744 acres of the WSA would be closed to recreational ORV use, There is one five-and-a half mile cherrystem road, four miles of ways in the northeast portion, and four major washes providing access. The cherrystem road is blocked by private land at its terminus and has been damaged by weather. This situation is expected to continue. The washes are Farrier (four miles) and Wildcat (seven miles) Washes, Hackberry (one-and-a-half miles) and Vigo (six miles) Canyons and would be closed. Designation would reduce vehicle usage, estimated currently at 225 visitor-days annually, to 100 visitor-days annually. Recreational vehicle use would be difficult to control in the Vigo Canyon drainage and would continue at a level sufficient to maintain the presence of ways.

Other Recreation

Dayhiking, backpacking, rock scrambling, nature study and horseback riding would be managed in the entire WSA. Hunting for deer, bighorn sheep, and game birds would continue, but without vehicles. Non-hunting recreation is estimated to be 100 visitor-days annually and is expected to increase to 250 visitor-days annually in the foreseeable future. Hunting use should remain unchanged at eighty visitor-days annually, as hunters grow in number and access shifts from vehicle to non-vehicular means.

Grazing Facility Maintenance and Construction

This alternative contains portions of nine allotments, two of which are ephemeral. These produce a pro-rated 3,554 AUMs plus an ephemeral allocation when available. One cherrystem road and a few ways and trails penetrate this WSA. Range facilities consist of a reservoir, pipeline and trough in Delamar Allotment, one-half mile of fence between Breedlove and Henrie Allotments, a reservoir and one mile of fence in Grapevine Allotment, a developed spring and corral at Hackberry Spring in Henrie Allotment and a spring development and corral in Morrison-Wengert Allotment. Depending upon circumstances specific to each case, motorized access to those existing developments which can be currently reached by vehicles may be restricted and maintenance may require accessing the sites by foot and by horseback.

Wildlife Management Actions

Two big game guzzlers would be built using non-impairing design, materials, construction methods and siting. Access would be obtained using non-impairing means. Maintenance would be accomplished using non-motorized methods.

No Wilderness Alternative

(Suitable: 0 acres, Nonsuitable: 185,744 acres)

Mineral Resource Actions

The 185,744 acres of the Meadow Valley Range WSA recommended as nonsuitable for wilderness designation would remain open to all forms of appropriation under the mineral leasing and mining laws.

Locatable Minerals

Mining claims cover about 30 acres on the western edge and about 2,200 acres on the extreme southeastern corner of the WSA. Exploration for metallic minerals in the WSA, excepting the extreme southeastern portion, is not anticipated. As can be inferred from the presence of several mining claims, some placer exploration may occur for precious metals in the southeastern portion of the WSA. Exploration would involve the building of one to two miles of road, several backhoe test pits and/or several drill holes. Total surface disturbance is not expected to exceed six acres from this activity, Development is not foreseen as it is believed precious metals do not occur in sufficient quantities to be economic.

The entire southern half of the WSA is thought to have a moderate favorability for the occurrence of chemical and/or metallurgical grade limestone. Additionally, there is a low favorability for occurrence of inferred gypsum, silica sand and perlite. Exploration and/or development, however, are not expected due to the rough terrain, distance to market and availability of exploitable resources which exist closer to population centers and rail lines.

Leasable Minerals

Most of the WSA is leased post-FLPMA for oil and gas. Exploration and/or development are not expected because of the general lack of interest exhibited by the petroleum industry and better potential for reserves in other areas.

Salable Minerals

It is doubtful that the sand and gravel in the WSA would ever be exploited as ample aggregate reserves exist outside the WSA which are closer to project areas.

Recreation Management Actions

Recreational Off-Road Vehicle Use

All of the WSA's 187,744 acres would remain open to off-road vehicle use, Difficulty of access and rugged terrain limit this use to some major washes and to the northeast corner of the WSA. These washes are Wildcat and Farrier washes, Hackberry and Vigo Canyons. Occasional ORV races would be permitted in Wildcat and Farrier washes. Several ways in the Vigo Canyon drainage would be used moderately and become more prominent. The mountains are too rugged for vehicle use but the large central bajada could become used extensively when access is developed through the bluffs bordering Meadow Valley Wash, Vehicle use is estimated at 225 visitor-days annually and would increase to 450 visitor-days annually in the foreseeable future.

Other Recreation

Dayhiking, backpacking, rock scrambling, nature study and horseback riding would continue to be managed in the area. Hunting for deer, bighorn sheep and game birds would continue, making use of vehicles where access is available, Hunting use is estimated at 80 hunter-days annually and would increase to 120 hunter-days in the foreseeable future. Nonmotorized recreation use is estimated to be 100 visitor-days annually and is expected to increase to 150 visitor-days annually in the foreseeable future.

Grazing Facility Maintenance and Construction

This alternative contains portions of nine allotments, two of which are ephemeral. These produce a pro-rated 3,554 AUMs plus an ephemeral allocation when available. One cherrystem road and a few ways and trails penetrate this WSA. Range facilities consist of a reservoir, pipeline and trough in Delamar Allotment, one-half mile of fence between Breedlove and Henrie Allotments, a reservoir and one mile of fence in Grapevine Allotment, and one spring development and corral each, in Henrie and Morrison-Wengert Allotments. These developments would continue to be maintained as now, by accessing some with a vehicle using washes and ways, and others by horseback.

Two reservoirs would be developed in Breedlove Allotment along with improved access to them. One reservoir in Morrison-Wengert Allotment would be built, These would be built using power equipment to construct an earthfilled embankment. Surface disturbance would total about two acres each. All development would result in the construction or improvement of approximately eighteen miles of ways and occasional use thereof for maintenance purposes.

Wildlife Management Actions

There is one wildlife development in the WSA, a big game guzzler which lies near the southwestern boundary. The existing guzzler would continue to be maintained by a combination of driving and walking. Two additional big game guzzlers would be constructed without active concern for use of non-impairing materials, methods, access and locations. This would result in surface disturbance totaling one acre for both sites, visible tanks and collection aprons. Access would be constructed by clearing rocks, ledges, and other obstructions from approximately seventeen miles of washes to permit vehicle passage. Maintenance would be accomplished by vehicular access.

Resource Development Alternative
(Partial Wilderness)

(Suitable: 17,165 acres, Nonsuitable: 168,579 acres)

A portion of the Meadow Valley Range WSA, 17,165 acres centered on Hackberry Canyon and extending nearly across the WSA from east to west, is recommended as suitable for wilderness designation.

Mineral Resource Actions

Subject to valid existing rights, the 17,165 acres of the Meadow Valley Range WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for the development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

There are no mining claims in the area recommended as suitable. In the area recommended as nonsuitable, mining claims cover about 30 acres on the western edge and about 2,200 acres on the extreme southeastern corner of the WSA. No activity is anticipated on that portion of the western group of claims lying within the WSA. Some placer exploration, however, may occur for precious metals in the southeastern portion of the WSA. Exploration would involve the building of one to two miles of road, several backhoe test pits and/or several drill holes. Total surface disturbance is not expected to exceed six acres from this activity. Development is not foreseen since it is believed precious metals do not occur in sufficient quantities to be economic.

The entire southern half of the WSA is thought to have a moderate favorability for the occurrence of chemical and/or metallurgical grade limestone, Additionally, there is a low favorability for occurrence of inferred gypsum, silica sand and perlite. Exploration and/or development, however, are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources which exist closer to population centers and rail lines.

Leasable Minerals

Most of the WSA is leased post-FLPMA for oil and gas. Exploration and/or development are not expected because of the general lack of interest exhibited by the petroleum industry and better potential for reserves in other areas.

Salable Minerals

It is doubtful that the sand and gravel in the WSA would ever be exploited, as ample reserves exist outside the WSA boundary which are closer to project areas.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 17,165 acre portion of the WSA recommended as suitable would be closed to recreational ORV use. This area has no cherrystem roads and no ways, Vehicular access is attained one-and-a-half miles up Hackberry Canyon Wash and this would be closed off to the public. Since little vehicular access currently exists to this area, designation would have a minimal effect on motorized recreational usage. Use would fall from the current estimated fifty visitor-days annually to zero in the foreseeable future.

In the 170,579 acres nonsuitable area, ORV access would continue in the ways and washes of the Vigo Canyon drainage and up Wildcat and Farrier washes. Along the large central bajada, access would be light and intermittent until access is built through the bluffs bordering Meadow Valley Wash. Some ORV races would be permitted in Wildcat and Farrier washes. Use would rise from an estimated current use of 175 to 400 visitor-days annually in the foreseeable future.

Other Recreation

Dayhiking, backpacking, rock scrambling, and nature study would be managed for in the suitable area. Hunting for deer, bighorn sheep and game birds would continue on foot and horseback. Hunting use would remain near the present total of twenty-five hunter-days annually in the foreseeable future.

In portions of the nonsuitable area, these activities would continue, with most taking place in the rugged mountain and hill sections. Horseback riding would take place in the less precipitous terrain and in the canyons. Hunting for deer, bighorn sheep and game birds would continue using vehicles where access is available and on foot or horseback in relatively inaccessible areas. Non-motorized use is estimated to be 65 visitor-days annually and is expected to increase to 150 visitor-days annually in the foreseeable future, Hunting use is currently estimated to be fifty-five hunter-days annually and is estimated to be one hundred hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The area recommended as suitable contains portions of three allotments which produce a pro-rated 624 AUMs plus a small ephemeral allocation when available. No cherrystem roads penetrate this area. The only range facility consists of a developed spring in Morrison-Wengert Allotment at Hackberry Spring. Depending upon the specific circumstances, motorized access by the allottee may be continued to this development.

In the nonsuitable area, existing range facilities include a reservoir, trough and pipeline in Delamar Allotment, one-half mile of fence between Breedlove and Henrie allotments, a reservoir and one mile of fence in Grapevine Allotment, a developed spring and corral in Henrie Allotment, a developed spring in Morrison-Wengert Allotments. These developments would continue to be maintained as presently, by a combination of driving and horseback.

In the nonsuitable area, two reservoirs in Breedlove and one reservoir in Morrison-Wengert Allotment would be built, resulting in the construction or improvement of approximately eighteen miles of washes and ways to obtain access and occasional use thereof for maintenance. Power equipment would be used and surface disturbance would total six acres for the reservoirs.

Wildlife Management Actions

There is one wildlife development in the WSA, a big game guzzler which lies within the nonsuitable area. This project would continue to be maintained as presently, by a combination of walking and driving. Two additional big game guzzlers would be constructed without active concern for use of non-impairing materials, methods, access and locations. This would result in surface disturbance totaling one-half acre, visible tanks and collection aprons, Access would be constructed by clearing rocks, ledges and other obstructions from approximately seventeen miles of washes to permit vehicle passage, Maintenance would be accomplished by vehicular access.

Wilderness Accent Alternative

(Partial Wilderness Alternative Number Two)

(Suitable: 166,500 acres, Nonsuitable: 19,244 acres)

A majority of the Meadow Valley Range WSA, 166,500 acres, is recommended as suitable for wilderness designation. This includes all of the WSA, except for the Vigo Canyon drainage on the northeast side of the WSA.

Mineral Resource Actions

Subject to valid existing rights, the 166,500 acres of the Meadow Valley Range WSA recommended as suitable for designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for the development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

Mining claims cover about 30 acres on the western edge and about 2,200 acres on the extreme southeastern corner of the WSA in the area recommended as suitable. It is not anticipated that any action would occur on that portion of the claims lying within the WSA on the western edge.

The entire southern half of the WSA is thought to have a moderate favorability for the occurrence of chemical and/or metallurgical grade limestone. Additionally, there is a low favorability for occurrence of inferred gypsum, silica sand and perlite. Exploration and/or development, however, are not expected due to the rough terrain, distance to market and availability of exploitable resources which exist closer to population centers and rail lines. Therefore, no mining claims are expected to be filed.

Leasable Minerals

Most of the WSA is leased post-FLPMA for oil and gas. Exploration and/or development are not expected because of the general lack of interest exhibited by the petroleum industry and better potential for reserves in other areas.

Salable Minerals

In the suitable area, no permits would be issued. In the nonsuitable area, it is doubtful that the sand and gravel in the WSA would ever be exploited, as ample reserves exist outside the WSA boundary which are closer to project areas.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 166,500 acres the WSA recommended as suitable would be closed to recreational ORV use. In this area are one five-and-a-half mile cherrystem road and few ways. Access on approximately two miles of ways, and seven miles of Wildcat and three miles of Farrier washes, and one-and-a-half miles of lower Hackberry Canyon would be precluded. Designation would have a minimal effect on motorized recreational usage reducing it from a current estimated fifty visitor-days to zero visitor-days annually in the foreseeable future.

In the 21,244 acres recommended as nonsuitable, ORV access would continue in the ways and washes of the Vigo Canyon drainage. Current use is estimated to be 175 visitor-days annually and would rise to 300 visitor-days in the foreseeable future.

Other Recreation

Dayhiking, backpacking, rock scrambling, nature study and horseback riding would be managed in the suitable area. Hunting for deer, bighorn sheep and game birds would continue, but on foot or horseback. Non-motorized recreational use is currently estimated at 90 visitor-days annually and is expected to reach 225 visitor-days, while hunting would rise from the current estimate of 50 hunter-days annually to 75 hunter-days in the foreseeable future.

In the nonsuitable area, hunting by vehicle would continue for deer and game birds. Non-motorized recreational use is estimated at ten visitor-days annually and expected to increase to twenty-five visitor-days annually, while hunting use would rise from the current estimate of thirty hunter-days to eighty hunter-days annually in the foreseeable future.

Grazing Facility Maintenance and Construction

The suitable area of the WSA contains portions of nine allotments which produce a pro-rated 2,851 AUMs plus an ephemeral allocation when available. One cherrystem road and few ways and trails penetrate the area. Range facilities consist of a small reservoir, pipeline and trough in Delamar Allotment, one-half mile of fence between Breedlove and Henrie allotments, a reservoir and one mile of fence in Grapevine Allotment, and a developed spring in Henrie and Morrison-Wengert allotments. Depending upon circumstances specific to each case, motorized access to those existing developments which can be currently reached by vehicles may be restricted and maintenance may require accessing the sites by foot and by horseback.

Two reservoirs in Breedlove Allotment would be built in the suitable area. These would be built using powered equipment to construct an earth-filled embankment. Surface disturbance would total about one acre each and be confined to the watered area of the reservoirs.

In the nonsuitable area, existing ways would continue to be used for ranching and maintenance purposes. One reservoir in Morrison-Wengert allotment would be built. This would be built using powered equipment to construct an earthfilled embankment. Surface disturbance would total about two acres. This project would result in the construction or improvement of approximately four miles of way and occasional use thereof for maintenance.

Wildlife Management Actions

Two big game guzzlers would be built using non-impairing design, materials, construction methods and siting. Access would be obtained using non-impairing means. Maintenance would be accomplished using non-motorized methods.

MORMON MOUNTAINS WSA
(NV-050-0161) (162,887 acres)

Proposed Action

(Partial Wilderness Alternative)

(Suitable: 123,130 acres, Nonsuitable: 39,757 acres)

The majority of the WSA is recommended as suitable for wilderness designation, incorporating the central portion, the spectacular Moapa Peak area on the south and representative bajadas on several sides.

Mineral Resource Actions

Subject to valid existing rights, the 123,130 acres of the WSA recommended as suitable would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operations filed would be examined to determine validity. Plans of operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

In the 39,757 acres of the WSA recommended as nonsuitable, mineral leasing and mining exploration would continue in accordance with existing law.

Locatable Minerals

Within the area recommended as suitable are small blocks of mining claims in the southern and southeastern, and in the north-central portions. Exploration or development would not occur since no valid claims are likely to exist.

In the area recommended as nonsuitable, there is a large block of approximately 9,800 acres mining claims in the southwestern portion of the WSA. Placer exploration may occur on these claims, resulting in four miles of roads and less than fifteen acres of surface disturbance.

Leasable Minerals

Most of the WSA is leased post-FLPMA for oil and gas. In the area recommended as suitable, no exploration is expected.

In the area recommended as nonsuitable, exploration would occur in the southwestern quarter and east central fringe of the WSA. This would involve geophysical work, some road building

TABLE 2-3

SUMMARY OF IMPACTS
MEADOW VALLEY RANGE WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	NO WILDERNESS	RESOURCE DEVELOPMENT	WILDERNESS ACCENT
Impacts on Wilderness Values	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 97,180 acres recommended as suitable. The area recommended as nonsuitable would lose these values on 62,800 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 168,444 acres. Much of the 17,300 acres of upper Vigo Canyon drainage would lose these values due to ORV use.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 72,844 acres. These values would be reduced or lost on 112,900 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 17,165 acres recommended as suitable and on 42,879 acres of the area recommended as nonsuitable. These values would be lost or reduced on the remaining 125,700 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 166,500 acres recommended as suitable. These values would be lost or reduced on 19,244 acres recommended as nonsuitable.
Impacts on Development of Mineral Resources	Exploration may occur on claims in the southeast. No development is anticipated.	Exploration may occur on claims in the southeast prior to designation but valid discoveries are not anticipated.	Exploration would occur on claims in the southeast. No development is anticipated.	Exploration would occur on claims in the southeast. No development is anticipated.	Exploration may occur on claims in the southeast prior to designation but valid discoveries are not anticipated.
Impacts on Recreation	Motorized recreational use of 75 would be displaced. Use would reach 400 visits annually. Primitive recreational use would rise to 200 visits.	Motorized use would decrease from 225 to 100 visits annually. Primitive recreational use would rise to 250 visits.	Motorized use would rise to 450 visits annually. Primitive recreational use would rise to 150 visits annually.	Motorized use would rise to 400 visits annually. Primitive recreational use would rise to 150 visits.	Motorized use would rise to 300 visits annually. Primitive recreational use would rise to 300 visits.
Impacts on Livestock Grazing Management	Meeting non-impairment criteria would add an increment of effort and cost to one new reservoir project.	Two proposed reservoir projects would not be built.	There would be no effect.	There would be no effect.	Two proposed reservoir projects would not be built.

and two exploratory wells. Geophysical exploration would not exceed ten acres surface disturbance. Two wells would disturb approximately ten acres each for drill pads and access. For the most part, existing roads and trails would be used for access but would have to be upgraded. Development and production are not anticipated.

Salable Minerals

In the area recommended as suitable, no permits would be issued. In the area recommended as nonsuitable, one sand and gravel pit would be established, disturbing an area of fewer than ten acres.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 123,130 acres of the WSA recommended as suitable would be closed to recreational ORV use. Designation would have a minor effect on vehicular use changing it from a current estimated 180 visitor-days annually to 75 visitor-days annually in the foreseeable future.

In the area recommended as nonsuitable are 24,900 acres which would be open to vehicles. Most of this terrain would be used by vehicles since it is relatively level and bordered or penetrated by roads or ways. Motorized recreation vehicle use is estimated to rise from the current level of 330 visitor-days annually, to 525 visitor-days in the foreseeable future.

Other Recreation

In the area recommended as suitable, management would emphasize primitive recreation opportunities in the core of the area, in the Moapa Peak region and onto the upper bajadas all of which offer outstanding hiking, backpacking, climbing and photographic opportunities. Cave management would protect cave resources and spelunking opportunities. Horseback riding would be managed along the lower edges of the WSA where terrain permits.

The only good hunting is for birds and this would continue with access attained from bordering roads and cherrystem roads. Bighorn sheep hunting would continue on the present limited scale until populations recover, Designation would cause non-motorized recreational use to rise from the current estimated use of 350 visitor-days annually to 900 visitor-days annually in the foreseeable future while rising from 50 currently, to 100 visitor in the area recommended as non-suitable. Hunting use would rise from the current estimated 190 hunter-days annually, to 250 hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The area recommended as suitable contains portions of six grazing allotments which produce a pro-rated 1,021 AUMs, plus an ephemeral allocation when available. Developments consist of four spring developments, four water troughs, one corral, and approximately five miles of pipelines. Half-mile gap fences separate Gourd Spring Allotment from Mormon Peak and White Rock allotments, and White Rock and Henrie allotments. There is a small exclosure in White Rock Allotment in the portion recommended as nonsuitable.

Three springs would be redeveloped along with their associated pipelines and water storage facilities. A well has been proposed as a possible alternative to supply water in the southeast. All of these proposals can be reached by existing ways and/or cherrystem roads. Minor cleanup of these ways would be necessary and equipment such as backhoes and crawler tractors would be used to redevelop two of these springs and install pipelines and tanks. Use of equipment, facilities siting, access and materials would be accomplished in a way which preserves wilderness values. Surface disturbance would total twenty acres and would be largely confined to existing ways which would be rehabilitated and reseeded.

No developments are proposed in the area recommended as nonsuitable.

Wildlife Management Actions

Wildlife developments in the area recommended as suitable consist of three big game guzzlers, twenty-one quail guzzlers, and numerous gap fences. The existing fences and small game guzzlers would continue to be maintained as presently by a combination of walking and driving. The big game guzzlers would have to maintained by horseback. Five water catchments, eight big game guzzlers and several gap fences would be built. Design, siting, materials, access and construction methods would be accomplished in a non-impairing manner. Surface disturbance would total four acres. In the central portion of the WSA, a vegetation conversion project would convert 25 percent of a brush and pinyon-juniper covered 4,600 acres to improved big game forage.

In the area recommended as nonsuitable for wilderness designation, there are two quail guzzlers and their maintenance would continue as presently.

All Wilderness Alternative

(Suitable: 162,887 acres, Nonsuitable: 0 acres)

Mineral Resource Actions

Subject to valid existing rights, all 162,887 acres of the Mormon Mountains WSA would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operations filed would be examined to determine validity, Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

There is a large block of mining claims in the southwestern portion, scattered small blocks in the southeastern portion and a small block in the north-central portion of the WSA. Exploration or development would not occur since no valid claims are likely to exist.

Leasable Minerals

Although much of the WSA is leased post-FLPMA, no exploration is anticipated.

Salable Minerals

No permits would be issued.

Recreation Management Actions

Recreational Off-Road Vehicle Use

All 167,887 acres of the WSA would be closed to recreational ORV use, Approximately thirty-five miles of cherrystem roads would remain open, Twenty-five miles of ways would be closed. Due to terrain features, portions of 90,000 acres would be within reach of vehicles if not closed. Designation would reduce the estimated current annual motorized recreation use from 510 visitor-days to 300 visitor-days.

Other Recreation

Management would emphasize primitive recreation opportunities in the core of the area and in the Moapa Peak region, where steep terrain creates outstanding hiking, backpacking, climbing and photographic opportunities. Cave management would protect cave resources and spelunking opportunities. Horseback riding would be managed along the lower edges of the WSA where terrain permits.

The only good hunting is for birds and this would continue with access attained from bordering roads and cherrystem roads. Big horn sheep hunting would continue on the present limited scale until populations recover. Designation would cause non-motorized recreational use to rise from the current estimated use of 400 visitor-days annually to 1,000 visitor-days annually in the foreseeable future. Hunting use would drop slightly from the current estimated 250 hunter-days annually, to 200 hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The WSA contains portions of seven grazing allotments which produce a pro-rated 2,869 AUMs, and an ephemeral allocation when available. There are four spring developments, four water troughs, one corral, and about five miles of pipelines. Half-mile gap fences separate Gourd Spring from Mormon Peak and White Rock allotments, and White Rock and Henrie allotments. There is a small exclosure in White Rock Allotment. The springs would be maintained by the occasional use of motorized equipment such as a backhoe, to redevelop the source. Surface disturbance would total one acre. The fences would be maintained by horseback except for those close to boundary or cherrystem roads. Three springs are presently proposed for redevelopment along with their associated pipelines and water storage facilities. A well has been proposed as a possible alternative to supply water in the southeast. All of these proposals can be reached by existing ways and/or cherrystem roads. Minor clean-up of these ways would be necessary and equipment such as backhoes and crawler tractors would be used to redevelop two of these springs and install pipelines and tanks. Use of equipment, facilities siting and materials would be accomplished in a way which preserves wilderness values. Surface disturbance would total twenty acres and would be largely confined to existing ways which would be rehabilitated and reseeded.

Wildlife Management Actions

Wildlife developments in the WSA include three big game guzzlers, twenty-three quail guzzlers, and numerous gap fences. The guzzlers and fences would continue to be maintained as presently by a combination of driving and walking. Five water catchments, eight big game guzzlers and several gap fences would be built. Design, siting, materials, access and construction methods would be accomplished in a non-impairing manner. Maintenance will be made by non-vehicular access by walking from where cherrystem roads approach developments. Surface disturbance would total four acres. In the central portion of the WSA, a vegetation conversion project would convert 25 percent of a brush and pinyon-juniper covered 4,600 acres to improved big game forage.

No Wilderness Alternative

(Suitable: 0 acres, Nonsuitable: 162,887 acres)

Mineral Resource Actions

The 162,887 acres of the Mormon Mountains WSA recommended as nonsuitable for wilderness designation would remain open to all forms of appropriation under the mineral leasing and mining laws.

Locatable Minerals

The bulk of the Mormon Mountains is composed of Paleozoic limestone and dolomite, some of which may be of chemical or metallurgical grade. Exploration and/or development for limestone, however, are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources which exist closer to population centers and to rail lines.

Geochemical surveys have shown the presence of some metallics albeit in limited concentrations in and around the central Mormon Mountains WSA. There are approximately 10,350 acres of mining claims and some exploration activities would take place in the vicinity of Whitmore Mine through the south-central part and in the southwestern and southeastern areas of the WSA, Exploration would occur in the zone surrounding the Iron Blossom prospect in a band three miles wide and extending three miles west and four miles east. These activities would include ORV use, some road construction, claim staking, drilling, test pits and trenching. Around Whitmore Mine, road building is projected to be two miles and surface disturbance of ten acres or less, Mineralization in substantial economic quantities is not thought to exist, but some minor mine development is projected. This would result in another fifteen acres of disturbance.

Placer exploration may occur on the southwestern bajada, resulting in four miles of roads and less than fifteen acres of surface disturbance. Similar exploration would occur on the scattered claims of the southeastern area, resulting in three or four miles of road construction and less than two acres of surface disturbance. No development is projected in either area because it is not thought that precious metals economically exist.

Leasable Minerals

Nearly all of the WSA is leased post-FLPMA for oil and gas. Exploration is expected to occur in the western third and central eastern portion of the WSA. This would involve geophysical work, road building and exploratory well drilling. Geophysical exploration would not exceed ten acres of surface disturbance. Two wells would disturb approximately ten acres each for drill pads and access. For the most part, existing roads and trails would be used to access the drill sites but would have to be upgraded.

Salable Minerals

At least three sand and gravel pits would be established along the WSA's western boundary. The material produced is convenient for maintenance of the Meadow Valley Wash road and the Union Pacific Railroad. Each pit and access would disturb fewer than ten acres.

Recreation Management Actions

Recreational Off-Road Vehicle Use

All 167,887 acres of the WSA would remain open to off-road vehicular travel. Due to terrain restrictions, in practical terms, portions of 90,000 acres would be within reach of vehicles. Access would continue via approximately twenty-five miles of ways and thirty-five miles of cherrystem roads. An additional ten miles of road would become available through mineral exploration efforts. Current annual use of 510 visitor-days is estimated to increase to 1,000 visitor-days in the foreseeable future.

Other Recreation

In the core of the area and in the Moapa Peak region, steep terrain creates outstanding hiking, backpacking, climbing and photographic opportunities and prohibits vehicular access. Nonmotorized activities would continue there due to the area's attractiveness. Horseback riding would occur along the lower edges of the WSA where terrain permits and along roads and ways. Hunting for birds would continue, utilizing lower elevation roads and ways, as would hunting for big horn sheep in the higher elevations. Nonmotorized recreational use would rise from the current estimated annual use of 400 visitor-days, to 550 visitor-days in the foreseeable future. Hunting use would rise from the current estimated annual use of 250 hunter-days to 425 hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The WSA contains portions of seven grazing allotments which produce a pro-rated 2,869 AUMs plus an ephemeral allocation when available. Developments include four spring developments and water troughs, one corral, approximately five miles of pipeline, one and one-half miles of fences and a small exclosure. Three of the springs are proposed for redevelopment along with associated pipelines and water storage facilities. Backhoes and crawler tractors would be used to redevelop these springs and install pipelines and tanks. A well has been proposed as a possible alternative to supply water in the southeast. All of these facilities can be reached by existing ways and/or cherrystem roads with minor clean-up of the ways. Siting, construction methods, access and materials may not be consistent with wilderness preservation. Surface disturbance would total fifty acres.

Wildlife Management Actions

Wildlife developments include three big game guzzlers, twenty-three quail guzzlers and numerous gap fences. These would be maintained by a combination of driving and walking access as presently. Continued use of power equipment would be required to maintain the large apron and structures at one of the guzzlers. In the central portion of the WSA, a vegetation conversion project would convert 25 percent of a brush and pinyon-juniper covered 4,600 acres to improved big game forage.

Five water catchments, eight big game guzzlers, and the gap fences would be built. Construction of the big game guzzlers may produce an extra four miles of road and local impairment of wilderness values due to the choice of materials, construction methods, design and siting. Total surface disturbance, roads excluded, would be eight acres.

Lands

Based on past interest, the U.S. Air Force would install an electronic facility on the peak of Mormon Mountain. This would entail some leveling and clearing, the installation of small packages and some antennas.

Resource Development Alternative

(Partial Wilderness)

(Suitable: 23,690 acres, Nonsuitable: 139,197 acres)

The central portion of the Mormon Mountains WSA, 23,690 acres, is recommended as suitable for wilderness designation.

Mineral Resource Actions

Subject to valid existing rights, 23,690 acres ofthe Mormon Mountains WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operations filed would be examined to determine validity. Plans of operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

There are no mining claims within the area recommended as suitable. The bulk of the Mormon Mountains is composed of Paleozoic limestone and dolomite, some of which may be of chemical or metallurgical grade. Exploration activity to confirm or deny its presence has not occurred and, due to the exhibited lack of interest and distance to markets, exploration is unlikely to occur in the future. Limestone deposits sufficient to meet demand for decades are being mined now much nearer to population and transportation centers.

In the 139,197 acres recommended as nonsuitable, there are approximately 10,350 acres of mining claims. Some exploration activities would take place in the vicinity of Whitmore Mine through the south-central part and in the southwestern and southeastern areas of the WSA. Exploration would occur in the zone surrounding the Iron Blossom prospect in a band three miles wide and extending three miles west and four miles east. These activities would include ORV use, some road construction, claim staking, drilling, test pits and trenching. Around Whitmore Mine, road building is projected to be two miles and surface disturbance of ten acres or less. Mineralization in substantial economic quantities is not thought to exist, but some minor mine development is projected. This would result in another fifteen acres of disturbance.

Placer exploration may occur on the southwestern bajada, resulting in four miles of roads and fewer than fifteen acres of surface disturbance. Similar exploration would occur on the scattered claims of the southeastern area, resulting in three or four miles of road construction and fewer than two acres of surface disturbance. No development is projected in either area due to a lack of any indication that precious metals are economically present.

Leasable Minerals

Nearly all of the WSA is covered by post-FLPMA oil and gas leases but no drilling has occurred within the WSA.

No exploration and/or development are expected because the area recommended as suitable is confined to the highest, most precipitous terrain.

In the area recommended as nonsuitable, exploration is expected to occur in the western third and central eastern portion of the WSA. This would involve geophysical work, road building and exploratory well drilling. Geophysical exploration would not exceed ten acres of surface disturbance. Two wells would disturb approximately ten acres each for drill pads and access. For the most part, existing roads or trails would be used for access to the drill sites but would have to be upgraded.

Salable Minerals

At least three sand and gravel pits would be established in the area recommended as nonsuitable along the WSA's western boundary. The material produced is convenient for maintenance of the Meadow Valley Wash road and the Union Pacific Railroad. Each pit and access would disturb fewer than ten acres.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 23,690 acres recommended as suitable would be closed to recreational ORV use. No cherrystem roads and less than one mile of way would be closed, Designation would have little effect on vehicle usage as most of the area is physically inaccessible. The current estimated use of fewer than ten visitor-days annually, would fall to zero in the foreseeable future.

In the area recommended as nonsuitable, ORV use would be permitted on 139,197 acres. Ways or cherrystem roads penetrate this area approximately every four to seven miles. With the exception of the southwestern bajada and some basins on the southeastern and eastern sides, access off the running surface of these roads or ways is extremely limited because of boulders and steep rocky terrain. The estimated annual motorized recreation use is 510 visitor-days and would increase in the foreseeable future to 1,000 visitor-days.

Other Recreation

In the area recommended as suitable, management would emphasize the area's outstanding hiking, backpacking, climbing, spelunking, and photographic opportunities. Hunting opportunities are very limited. Non-motorized recreational use would rise from the current estimated annual use of 300 visitor-days, to 425 visitor-days in the foreseeable future. Hunting would rise from the current estimated thirty hunter-days, to fifty hunter-days in the foreseeable future.

In the area recommended as nonsuitable, primitive recreation would continue on approximately one-third, or 46,000 acres which are favorable for hiking, backpacking, climbing and photography, and which are too rugged to permit substantial amounts of vehicular access. Bird hunting would continue on the southern and eastern edges, rising from the current estimated 220, to a future use of 350 hunter-days annually. Non-motorized recreational use is estimated to rise from the current 100 visitor-days annually, to 150 visitor-days.

Grazing Facility Maintenance and Construction

The area recommended as suitable contains portions of three allotments which produce a pro-rated total of 238 AUMs. There are no developments within the area recommended as suitable and none are proposed.

In the area recommended as nonsuitable, there are four spring developments, four water troughs, one corral and approximately five miles of pipelines all in Mormon Peak Allotment. A one-half mile gap fence separates Gourd Spring and Mormon Peak allotments, a one-half mile gap fence separates Gourd Spring and White Rock allotments, a one-half mile of fence separates White Rock and Henrie allotments and a there is a small exclosure in White Rock Allotment. These developments would be maintained by driving to them and using equipment such as tractors to redevelop springs and replace pipelines.

Three springs are proposed for redevelopment along with associated pipelines and water storage facilities. All of these proposed areas can be reached by existing ways. Minor clean-up of these ways would be necessary and equipment such as backhoes and crawler tractors would be used to redevelop two of these springs and install pipelines and tanks. A well has been proposed as a possible alternative to supply water in the southeastern portion. Siting, construction methods and materials may not be consistent with wilderness preservation. Some fences cannot be accessed by vehicle and would be maintained by horseback. Surface disturbance would reach fifty acres.

Wildlife Management Actions

Wildlife developments in the area recommended as suitable include three big game guzzlers, two quail guzzlers and several gap fences. The guzzlers would continue to be maintained by a combination of driving and walking. Three additional water catchments would be constructed, as well as the remaining gap fences, using non-impairing materials, methods, access and siting. In the central portion of the WSA, a vegetation conversion project using fire would convert 25 percent of a brush and pinyon-juniper covered 3,420 acres to improved big game forage.

In the area recommended as nonsuitable, there are several gap fences and twenty-one quail guzzlers. These would continue to be maintained by using vehicular access. Eight big game guzzlers would be built and their construction would produce an additional four miles of road and local impairment of wilderness values due to choice of materials, construction methods, design, access and siting. Two catchments would be built. In addition to the roads, surface disturbance would total four acres. Several gap fences would be built with minor effect on wilderness values. In the central portion of the WSA, a vegetation conversion project using fire would convert 25 percent of a brush and pinyon-juniper covered 1,180 acres to improved big game forage.

TABLE 2-4

SUMMARY OF IMPACTS
MORMON MOUNTAINS WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	NO WILDERNESS	RESOURCE DEVELOPMENT
Impacts on Wilderness Values	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on most of the 123,130 acres recommended as suitable. These values would be lost on 24,900 acres of the area recommended as nonsuitable due to ORV, mining exploration and other uses.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation will be retained on most of the 167,887 acres recommended as suitable. Naturalness will be lost on 4,700 acres of the southern through eastern and northeastern edges due to ORV use.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained in the central, northwestern, western and Moapa Peak portions. These values will be reduced in large parts of the remainder and lost on the southwestern, southern, southeastern, eastern and northeastern edges due to ORV, mining exploration and other uses.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 23,690 acres recommended as suitable. These values would be lost on a 58,400 acres of the area recommended as nonsuitable.
Impacts on Mineral Resources	Unless existing claims have valid discoveries, exploration would cease in the southeast. Exploration may occur on the southwest but development is not anticipated.	Unless existing claims have valid discoveries, exploration would cease.	Exploration may occur on claims in the southwest and around Whitmore Mine and would continue sporadically in the southeast. Minor development is anticipated.	Exploration may occur on claims in the southwest and around Whitmore Mine and would continue sporadically in the southeast. Minor development is anticipated.
Impacts on Recreation	Current motorized use of 510 visits would rise to 600 visits with 100 visits displaced. Primitive recreation use would rise from 400 visits to 1,000 visits annually.	Current motorized use of 510 visits would fall to 300 visits with 510 visits displaced. Primitive recreation use would rise from 400 visits to 1,000 visits annually.	Current motorized use of 510 visits annually would rise to 1,000 visits. Primitive recrea-use would rise from 400 visits to 550 visits.	Current motorized use of 510 visits would rise to 1,000 visits. Primitive recreation would rise from 400 visits to 575 visits annually.

TABLE 2-4

SUMMARY OF IMPACTS
MORMON MOUNTAINS WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	NO WILDERNESS	RESOURCE DEVELOPMENT
Impacts on Bighorn Sheep	Eight proposed bighorn sheep guzzlers would have to meet non-impairment criteria and one existing guzzler may have to be redesigned. Habitat would receive increased protection. Bighorn sheep would increase 25 percent.	Three proposed bighorn sheep guzzlers would have to meet non-impairment criteria and one existing guzzler may have to be redesigned. Habitat would receive increased protection. Bighorn numbers would increase 25 percent.	There would be no effect on projects. Some habitat would be affected by surface disturbance and human intrusion.	One existing bighorn sheep guzzler may have to be redesigned to meet non-impairment criteria. Some habitat would be affected by surface disturbance and human intrusion. Bighorn sheep numbers would increase 25 percent.
Impacts on Cultural Resources	Maximizes protection of numerous significant cultural resources including 114 roasting pits, 17 lithic scatters. 20 rock-shelters with art, 14 historic sites and 8 rock features. Four sites are outside, but proximate to the area recommended as suitable and would benefit from increased patrols.	Provides the maximum protection for numerous significant cultural resource sites including 114 roasting pits, 17 lithic scatters, 20 rock-shelters with art, 16 historic sites and 9 rock features.	No additional protection above that afforded by antiquities laws and regulations for 260 cultural resource sites would be initiated.	Provides additional protection for eleven roasting pits, two lithic scatters, six rock-shelters with art, one historic site and one rock feature.

DELAMAR MOUNTAINS WSA (NV-050-0177) (126,257 acres)

Proposed Action (No Wilderness Alternative)

(Suitable: 0 acres, Nonsuitable: 126,257 acres)

Mineral Resource Actions

The 126,257 acres of the Delamar Mountains WSA recommended as nonsuitable for wilderness designation would remain open to all forms of appropriation under the mineral leasing and mining laws.

Locatable Minerals

There is some potential for the occurrence of chemical and/or metallurgical grade limestone and silica sand within the western, southern and southeastern flanks of the WSA in outcropping units of carbonate and quartzite. There has been no exploration and none is foreseen. The absence of mining claims also indicates a lack of interest by the mining industry. Known deposits of limestone and silica, in closer proximity to population and transportation centers, are currently being exploited and would meet needs for many years.

Leasable Minerals

None of the WSA is currently leased for oil and gas. Some geophysical exploration may occur in the southern half. Two lines are predicted which would disturb fewer than six acres. If explosives are used as an energy source, approximately six miles of roads and two acres of additional disturbance would occur. Development in terms of wildcat drilling is not anticipated because of high industry costs, unfavorable structure and host rocks and the better potential for finds in more favorable areas.

Salable Minerals

The only potential users would be county and state highway departments for local maintenance and construction of roads. Abundant gravel resources exist outside the WSA boundary close to existing roads which can meet minor local demand. Due to convenience of access, however, approximately five acres of disturbance would occur along the lower Kane Springs Wash Road due to use of materials for road maintenance. If demand increases due to approval of projects like the Aerojet/BLM land exchange, Kane Springs Wash road may be upgraded to state highway standards, resulting in another ten acres of disturbance for material and construction sites.

An attempt to develop permanent water in Bomber Wash by well drilling ended in failure. Other options include installation of a pipeline or large catchment and storage facilities. It is likely that a pipeline would be built which would cross approximately three miles of the WSA but would lie within the Pony Well cherrystem road. Two and one-half miles of fence would be built.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 126,257 acres of the WSA would remain open to recreational ORV use. The five mile Pony Well and three mile Willow Spring cherrystem roads, fifteen miles of ways and Bomber Wash, through which access is obtained from the south into the middle of the WSA, would be used for access. The current estimated annual motorized recreational vehicle use is one hundred visitor-days and would rise to two hundred visitor-days in the foreseeable future.

Other Recreation

Dayhiking, rock climbing and scrambling, backpacking, nature study and photography would continue but would not be managed for. The current estimated annual use of twenty-five visitor-days would increase very slowly to seventy-five visitor-days as recreation resources closer to Las Vegas become more use-saturated. Existing ways and washes would be used to hunt for birds and would increase from the current estimated annual use of two hundred hunter-days, to three hundred hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The WSA contains portions of four allotments which produce a pro-rated 2,917 AUMs. Existing developments include approximately five and one-half miles of fence in Lower Lake East Allotment, approximately one and one-half miles of fence between Buckhorn and Delamar allotments, three reservoirs, one tank, one water haul, and two miles of fence in Delamar allotment, two developed springs, water trough, corral and two and one-half miles of pipeline in Grapevine Allotment. These would be maintained by vehicular access and with use of power equipment, including backhoes and tractors. Surface disturbance would total twelve acres.

Wildlife Management Actions

Wildlife developments in the WSA consist of ten quail guzzlers located along the southern and southeastern fringes of the WSA within a mile and one half of the boundary. Maintenance of the guzzlers would be accomplished by a combination of driving and walking access.

Realty Management Actions

A proposed utility corridor running along the western side of the WSA for eleven miles would be developed. It is projected that five 500 kV transmission lines, two gas and two fiber optic lines and three access roads would be built within this one mile wide corridor. Construction of these projects would cause surface disturbance on 377 acres of the corridor.

All Wilderness Alternative

(Suitable: 126,257 acres, Nonsuitable: 0 acres)

Mineral Resource Actions

Subject to valid existing rights, all 126,257 acres of the Delamar Mountains WSA would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operations filed would be examined to determine validity, Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations.

Locatable Minerals

There is some potential for the occurrence of chemical and/or metallurgical grade limestone and silica sand within the western, southern and southeastern flanks of the WSA in outcropping units of carbonate and quartzite. There has been no exploration and none is foreseen. The absence of mining claims also indicates a lack of interest by the mining industry. Known deposits of limestone and silica, in close proximity to populations and transportation centers, are currently being exploited and would meet needs for many years, With designation, no exploration or development would occur as valid claims are not anticipated.

Leasable Minerals

None of the WSA is leased for oil and gas. With designation, leasing would cease if surface occupancy is required.

Salable Minerals

No permits would be issued.

Recreation Management Actions

Recreational Off-Road Vehicle Use

The 126,257 acres of the WSA would be closed to recreational ORV use. Use of seven miles of the Pony Well and Willow Spring cherrystem roads would continue but use of the fifteen miles washes and ways, including Bomber Wash which provides access into the middle of the WSA, would be precluded. The estimated current annual motorized recreational vehicle use is one hundred visitor-days and would remain about the same in the foreseeable future as use shifts from ways and washes to the cherrystem roads.

Other Recreation

Dayhiking, rock climbing and scrambling, backpacking, nature study and photography would be managed in the area. The current estimated annual use of 25 visitor-days would increase to 175 visitor-days. Hunting for birds would continue from bordering ways and would remain stable at about two hundred hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The WSA contains portions of four allotments which produce a pro-rated 2,917 AUMs. Existing developments include approximately five and one-half miles of fence in Lower Lake East Allotment, approximately one and one-half miles of fence between Buckhorn and Delamar allotments, three reservoirs, one tank, one water haul, and two miles of fence in Delamar allotment, two developed springs, water trough, corral and two and one-half miles of pipeline in Grapevine Allotment.

The existing projects would be maintained as presently, using cherrystem roads and ways. An attempt to develop permanent water in Bomber Wash by well drilling ended in failure. Remaining options include installation of a pipeline or large catchment and storage facilities. It is likely that a pipeline would be built which would cross approximately three miles of the WSA but lie within the Pony Well cherrystem road. Two and one-half miles of fence would be built using metal and juniper posts.

Wildlife Management Actions

Wildlife developments in the WSA consist of ten quail guzzlers located along the southern and southeastern fringes of the WSA within a mile and one-half of the boundary. These would be maintained by walking in from the boundary of the designated wilderness.

Resource Development Alternative

(Partial Wilderness Alternative)

Suitable: 48,164 acres, Nonsuitable: 78,093 acres)

Mineral Resource Actions

Subject to valid existing rights, the 48,164 acres of the Delamar Mountains WSA recommended as suitable for wilderness designation would be withdrawn from all forms of appropriation under the mining laws and from surface occupancy under the mineral leasing laws. Mining claims having Plans of Operation filed would be examined to determine validity. Plans of Operation for development of claims that exist at the time of designation would be processed in accordance with existing regulations

Locatable Minerals

In the area recommended as suitable for wilderness designation, there are no mining claims and no valid ones are expected. In the area recommended as nonsuitable, there is some potential for the occurrence of metallurgical/chemical grade limestone and silica sand within the western, southern and southeastern flanks of the WSA in outcropping units of carbonate and quartzite. There has been no exploration and none is foreseen. The absence of mining claims also indicates a lack of interest by the mining industry. Known deposits of limestone and silica in close proximity to population and transportation centers are currently being exploited and would meet needs for many years.

Leasable Minerals

None of the WSA is leased for oil and gas. No leasing would occur in the area recommended as suitable, if surface occupancy is required. Some geophysical exploration may occur in the southern half in the area recommended as nonsuitable. Two lines would disturb less than six acres. If explosives are used as an energy source, approximately six miles of roads and two acres of additional disturbance would occur.

Salable Minerals

In the area recommended as suitable, no permits would be issued. In the area recommended as nonsuitable, the only potential users would be county and state highway departments for local maintenance and construction of roads. Minor local demand can be met from abundant gravel resources which exist outside the WSA boundary and close to existing roads. Due to convenience of access, however, approximately five acres of disturbance would occur along the lower Kane Springs Wash road due to use of materials for road maintenance. If demand increases due to approval of projects like the Aerojet/BLM land exchange, Kane Springs Wash road may be upgraded to state highway standards, resulting in another ten acres of disturbance for material and construction sites.

Recreation Management

Recreational Off-Road Vehicle Use

Recreational ORV use would not be permitted in the 48,164 acres of the WSA recommended as suitable. Present use occurs on one mile of way and the upper one-half of Bomber Wash through which some access is obtained. Current estimated annual use is ten visitor-days and would fall to zero in the foreseeable future.

The area recommended as nonsuitable comprises 78,093 acres and would remain open to ORV use. Access is obtained through the seven-mile Pony Well cherrystem road and fourteen miles of ways. Use of these would continue unimpeded except for upper Bomber Wash and the way extending from the terminus of the Pony Well road, both of which lie within the area recommended as suitable. The estimated annual motorized recreation use is ninety visitor-days and would rise to two hundred visitor-days in the foreseeable future.

Other Recreation

Dayhiking, rock climbing and scrambling, backpacking, nature study and photography would be managed in the area recommended as suitable. Hunting for birds would continue from bordering ways. Non-motorized recreation use would increase from the current estimated annual fifteen visitor-days to seventy-five visitor-days in the foreseeable future and hunting use would remain the same at ten hunter-days.

In the area recommended as nonsuitable, day-hiking, rock climbing and scrambling, backpacking, nature study and photography would continue, but would not be managed for. The current annual non-motorized recreational use of ten visitor-days would rise to fifty visitor-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The area recommended as suitable contains portions of four allotments which produce a prorated 1,419 AUMs. There are no developments within this area, In the area recommended as nonsuitable, developments include approximately five and one-half miles of fence in Lower Lake East Allotment, approximately one and one-half miles of fence between Buckhorn and Delamar allotments, three reservoirs, one tank, one water haul, and two miles of fence in Delamar Allotment, two developed springs, water trough, corral and two and one-half miles of pipeline in Grapevine Allotment. These projects would be maintained using cherrystem roads and ways.

Developments to be built are limited to the area recommended as nonsuitable and to Delamar Allotment. They include a permanent water source in Bomber Wash and two and one-half miles of fence in the northern portion. An attempt to develop permanent water in Bomber Wash by well drilling ended in failure, Other options include installation of a pipeline or large catchment and storage facilities. It is likely that a pipeline would be built which would cross approximately three miles of the WSA but would use the Pony Well cherrystem road. Two and one-half miles of fence would be built.

Wildlife Management Actions

There are no developments in the area recommended as suitable. There are six quail guzzlers in the area recommended as nonsuitable. All guzzlers are within one and one-half miles of the WSA's southern and southeastern boundaries. No additional projects are proposed. Maintenance of the guzzlers would be accomplished by a combination of driving and walking.

Realty Management Actions

A proposed utility corridor running alongthe west side of the WSA for eleven miles would be developed. It is projected that five 500 kV transmission lines, two gas and two fiber optic lines and three access roads would be built within this one mile wide corridor. Construction of these projects would cause surface disturbance on 377 acres of the corridor.

Wilderness Accent Alternative

(Partial Wilderness Alternative)

(Suitable: 102,490 acres, Nonsuitable: 23,767 acres)

The central portion of the Delamar Mountains WSA is recommended as suitable for wilderness designation. The suitable area extends from a northern bounding way on the flats near Delamar Lake to the southern ends of the mesa tops on the south. It includes the uplands and portions of the surrounding alluvial fans. The area recommended as nonsuitable includes the alluvial fans adjacent to Highway 93 and those along the WSA's southern end. An area of flatter ground and low hills penetrated by a cherrystem road in the southeastern area of the WSA is also recommended as nonsuitable.

Mineral Resource Actions

Locatable Minerals

Metallic minerals potential is considered low for the entire WSA. There is some potential for the occurrence of metallurgical/chemical grade limestone and silica within the western, southern and southeastern flanks of the WSA in outcropping units of carbonate and quartzite. There has been no exploration and none is foreseen. The absence of mining claims also indicates a lack of interest by the mining industry. Known deposits of limestone and silica, in close proximity to population and transportation centers, are currently being exploited and would meet needs for many years.

Leasable Minerals

None of the WSA is leased for oil and gas. With designation, leasing would cease if surface occupancy is required. Some geophysical exploration may occur in the southern half of the WSA. One line is predicted which would disturb less than three acres. If explosives are used as an energy source, approximately three miles of roads and one acre of additional disturbance would occur in the area recommended as nonsuitable.

Salable Minerals

In the area recommended as suitable, no permits would be issued. In the area recommended as nonsuitable, the only potential users would be county and state highway departments for local maintenance and construction of roads. Minor local demand can be met from abundant gravel resources which exist outside the WSA boundary close to existing roads. Due to convenience of access, however, approximately five acres of disturbance would occur along the lower Kane Springs Wash road due to use of materials for road maintenance. If demand increases due to approval of projects like the Aerojet/BLM land exchange, Kane Springs Wash road may be upgraded to state highway standards, resulting in another ten acres of disturbance for material and construction sites.

Recreation Management Actions

Recreational Off-Road Vehicle Use

In the area recommended as suitable, recreational ORV use would be precluded on 102,490 acres. Vehicle use would continue on five miles of the Pony Well cherrystem road, but would stop on six miles of way and the upper three-fourths of Bomber Wash through which some access is available, Estimated recreational vehicle use is currently twenty visitor-days annually, and would fall to ten visitor-days in the foreseeable future.

The area recommended as nonsuitable contains 23,767 acres which would remain open to ORV use. Access would continue on five miles of ways. The current annual estimated recreational vehicle use of 80 visitor-days would rise to 150 visitor-days in the foreseeable future.

Other Recreation

In the area recommended as suitable, dayhiking, rock climbing and scrambling, backpacking, nature study and photography would be managed for. Non-motorized recreation use would increase from the current estimated annual 25 visitor-days to 125 visitor-days in the foreseeable future. Hunting for birds would continue along the southeastern and southern fringes of the WSA and would rise from the current estimated fifty hunter-days annually, to ninety hunter-days in the foreseeable future.

In the area recommended as nonsuitable, occasional dayhiking, nature study, and photography would occur, rising from the current estimated annual zero use, to thirty visitor-days in the foreseeable future. Hunting for birds would continue and rise from the current annual estimated 150 hunter-days to 210 hunter-days in the foreseeable future.

Grazing Facility Maintenance and Construction

The portion of the WSA recommended as suitable contains parts of four allotments which produce a pro-rated 1,632 AUMs. Existing developments include one mile of fence between Buckhorn and Delamar Allotments, another mile in Delamar Allotment, three reservoirs, and one water haul. Maintenance of the fence would be done by walking or horseback over the short distance within the WSA. The water haul and reservoirs are along the Pony Well cherrystem road and would be accessed from it.

In the area recommended as nonsuitable, existing developments include approximately five and one-half miles of fence in Lower Lake East Allotment, approximately one-half mile of fence between Buckhorn and Delamar allotments, one tank, two developed springs, water trough, corral and two and one-half miles of pipeline in Grapevine Allotment. These projects would be maintained using cherrystem roads and ways.

An attempt to develop permanent water in Bomber Wash by well drilling ended in failure. Other options include installation of a pipeline or large catchment and storage facilities. It is likely that a pipeline would be built which would cross approximately three miles of the WSA but would use the Pony Well cherrystem road. This project would be adjacent to the area recommended as suitable, but within the cherrystem. Two and one-half miles of fence would be built.

Wildlife Management Actions

Wildlife developments in the area recommended as suitable consist of four quail guzzlers. Another six quail guzzlers are located in the area recommended as nonsuitable. All guzzlers are within one and one-half miles of the WSA's southern and southeastern boundaries. No additional projects are proposed. Maintenance of the guzzlers, both within and out of the area recommended as suitable would be in a non-wilderness impairing manner, with no motor vehicles utilized in the area designated as wilderness.

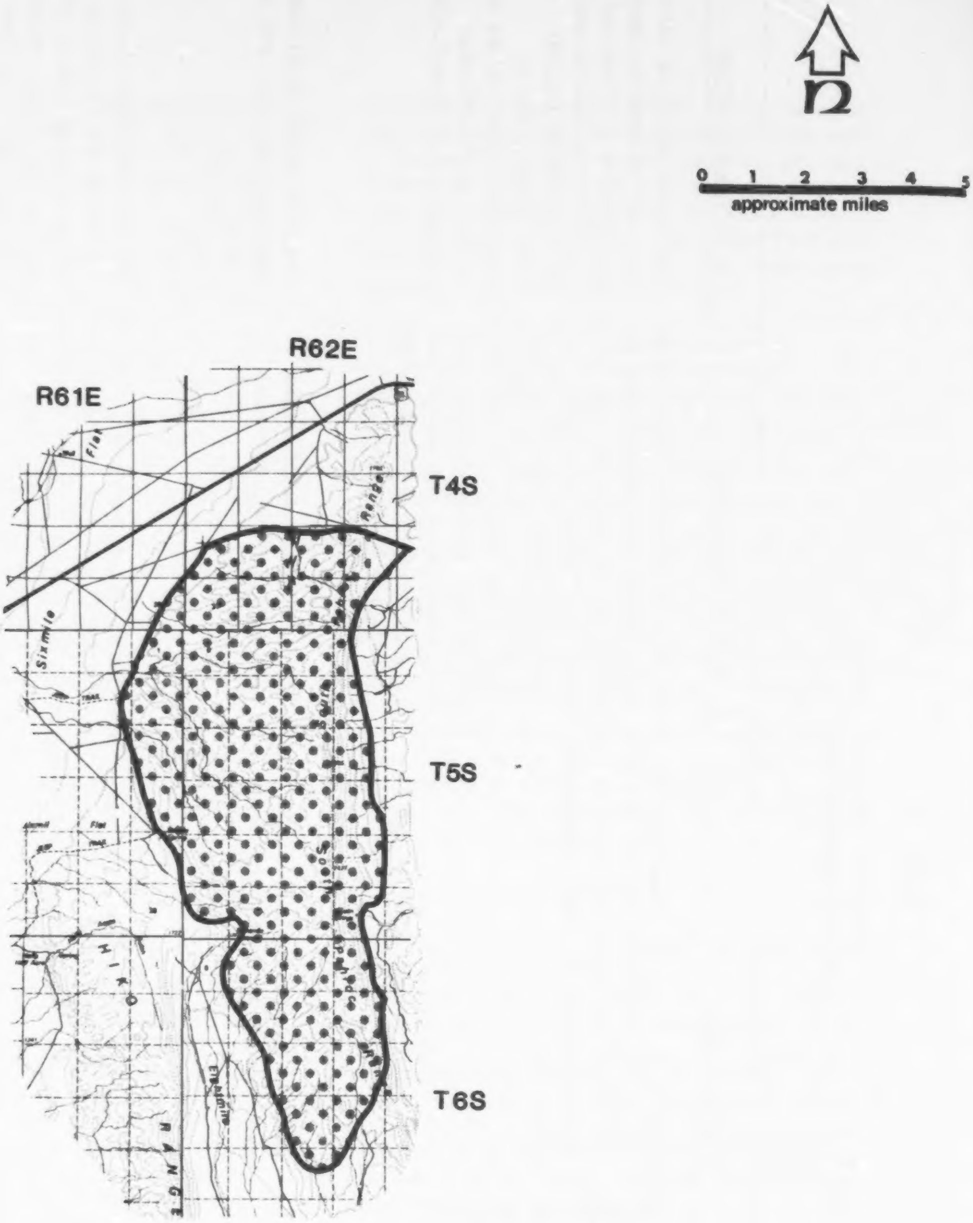
Realty Management Actions

A proposed utility corridor running along the western side of the WSA for eleven miles would be developed. It is projected that five 500 kV transmission lines, two gas and two fiber optic lines and three access roads would be built within this corridor which would be one mile wide for most of its length, but would narrow to three-quarters of a mile for two miles near the southern end of the WSA. Construction of these projects would cause surface disturbance on 369 acres of the corridor.

TABLE 2-5

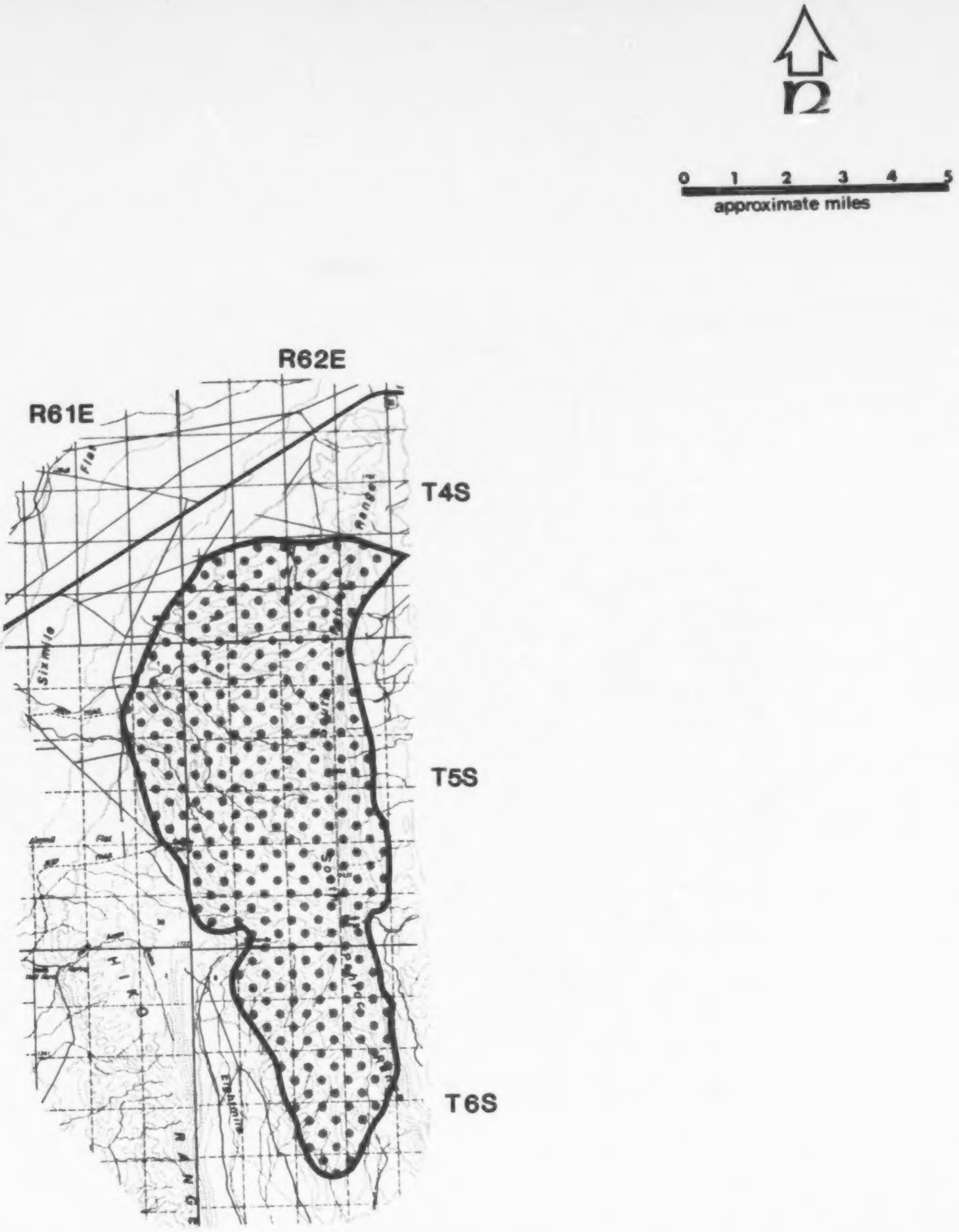
SUMMARY OF IMPACTS
DELAMAR MOUNTAINS WSA

IMPACT TOPIC	PROPOSED ACTION	ALL WILDERNESS	RESOURCE DEVELOPMENT	WILDERNESS ACCENT
Impacts on Wilderness Values	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on most of the area. These values would be lost on the western and southern sides dues to intrusions and ORV use over 25,000 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 126,257 acres recommended as suitable.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 48,164 acres recommended as suitable. These values would be retained on much of the remaining 78,093 acres recommended as nonsuitable, but would be lost on the western and southern sides due to intrusions and ORV use on 23,000 acres.	Wilderness values of naturalness and outstanding opportunities for solitude and unconfined recreation would be retained on 102,490 acres recommended as suitable. These values would be lost on 20,000 acres recommended as nonsuitable.
Impacts on the Development of Mineral Resources	Sand and gravel would remain available for road crew use.	Sand and gravel, abundant in the region, would not be available for road crew use.	Sand and gravel would remain available for road crew use.	Sand and gravel would remain available for road crew use.
Impacts on Recreation Resources	Current motorized recreation use of 100 visits annually would rise to 200 visits. Primitive recreation use would rise from 25 visits to 75 visits.	Current motorized recreation use of 100 visits annually would not change. Primitive recreation use would rise from 25 visits to 175 visits.	Current motorized recreational use of 100 visits annually would rise to 200 visits. Primitive recreation use would rise from 15 visits to 75 visits.	Current motorized recreational use of 100 visits annually would rise to 160 visits. Primitive recreation use would rise from 25 to 155 visits.
Impacts on Development of Utilities	There would be no effect.	Substantial effects and addional resource conflicts would arise as a consequence to not allowing a utility corridor to be developed through the WSA.	There would be no effect.	There would be no effect.


N
0 1 2 3 4 5
approximate miles
R61E
R62E
T4S
T5S
T6S
Sixmile Flat
Range
South Pahroc Range
HIKO RANGE

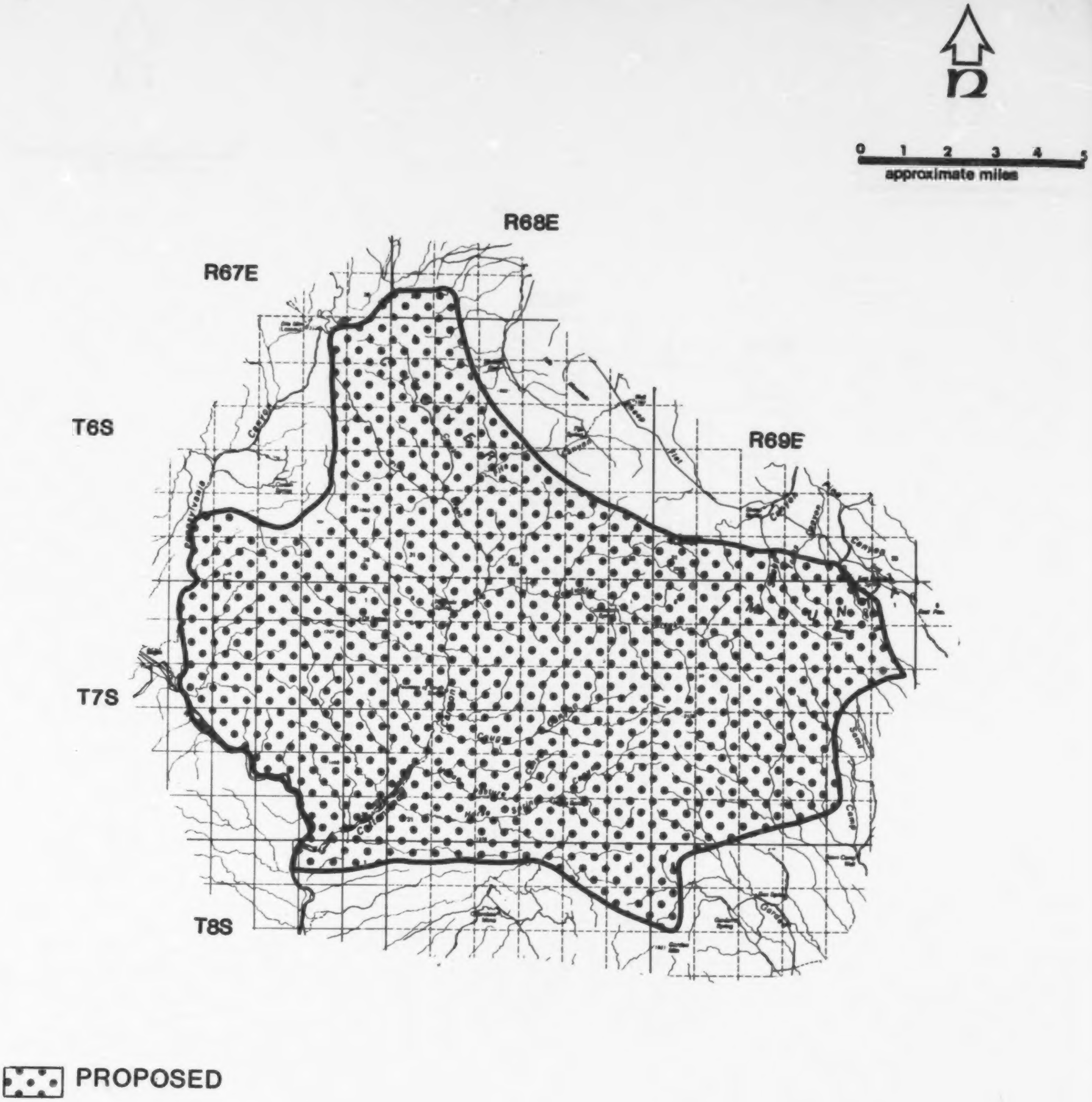
▨ PROPOSED

ALTERNATIVES
SOUTH PAHROC NV-050-0132


N
0 1 2 3 4 5
approximate miles
R62E
R61E
T4S
T5S
T6S
Sixmile
Flat
HIKO
RANGE

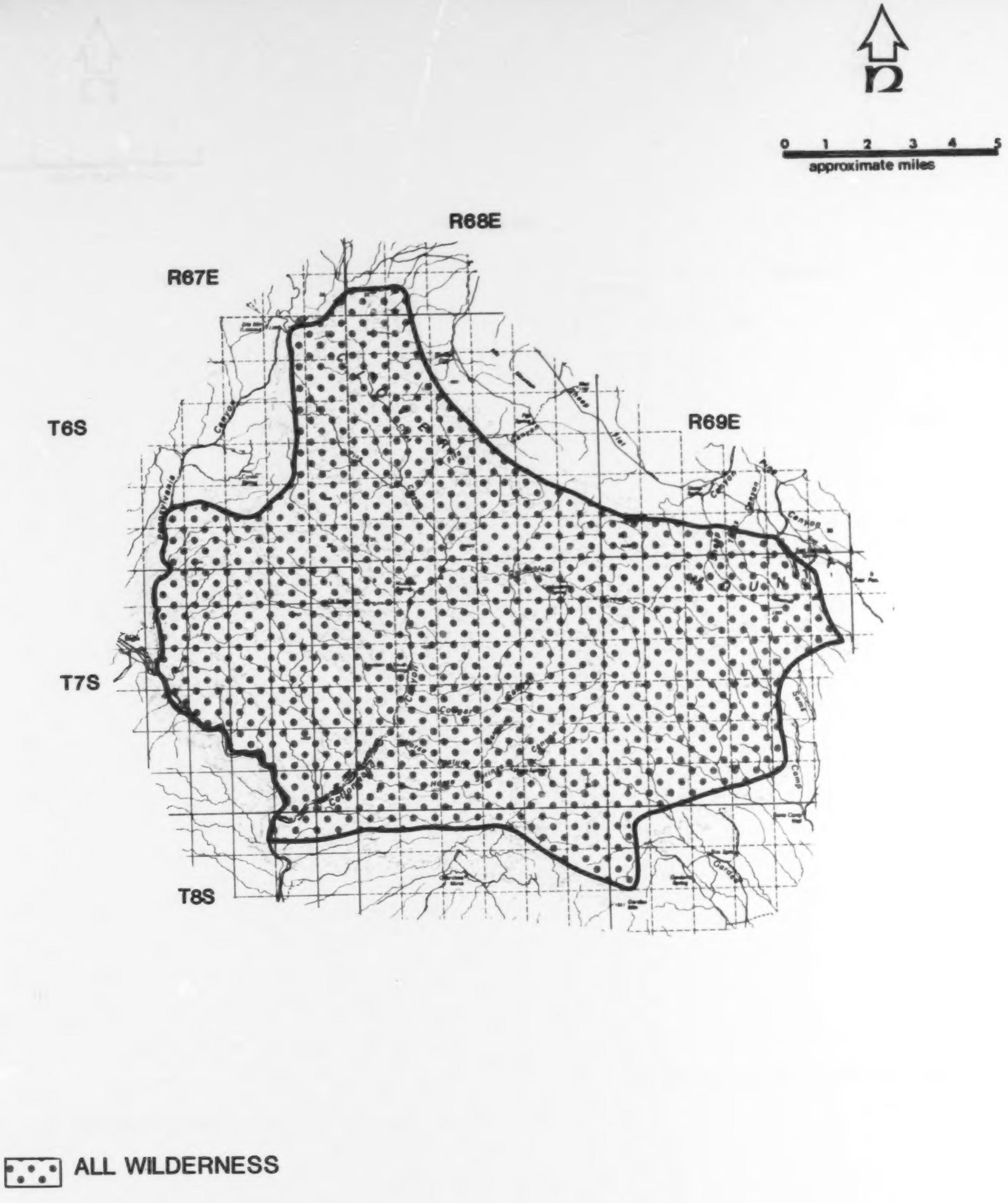
⁙ ALL WILDERNESS

ALTERNATIVES
SOUTH PAHROC NV-050-0132


N
0 1 2 3 4 5
approximate miles
R68E
R67E
T6S
R69E
T7S
T8S
PROPOSED

ALTERNATIVES

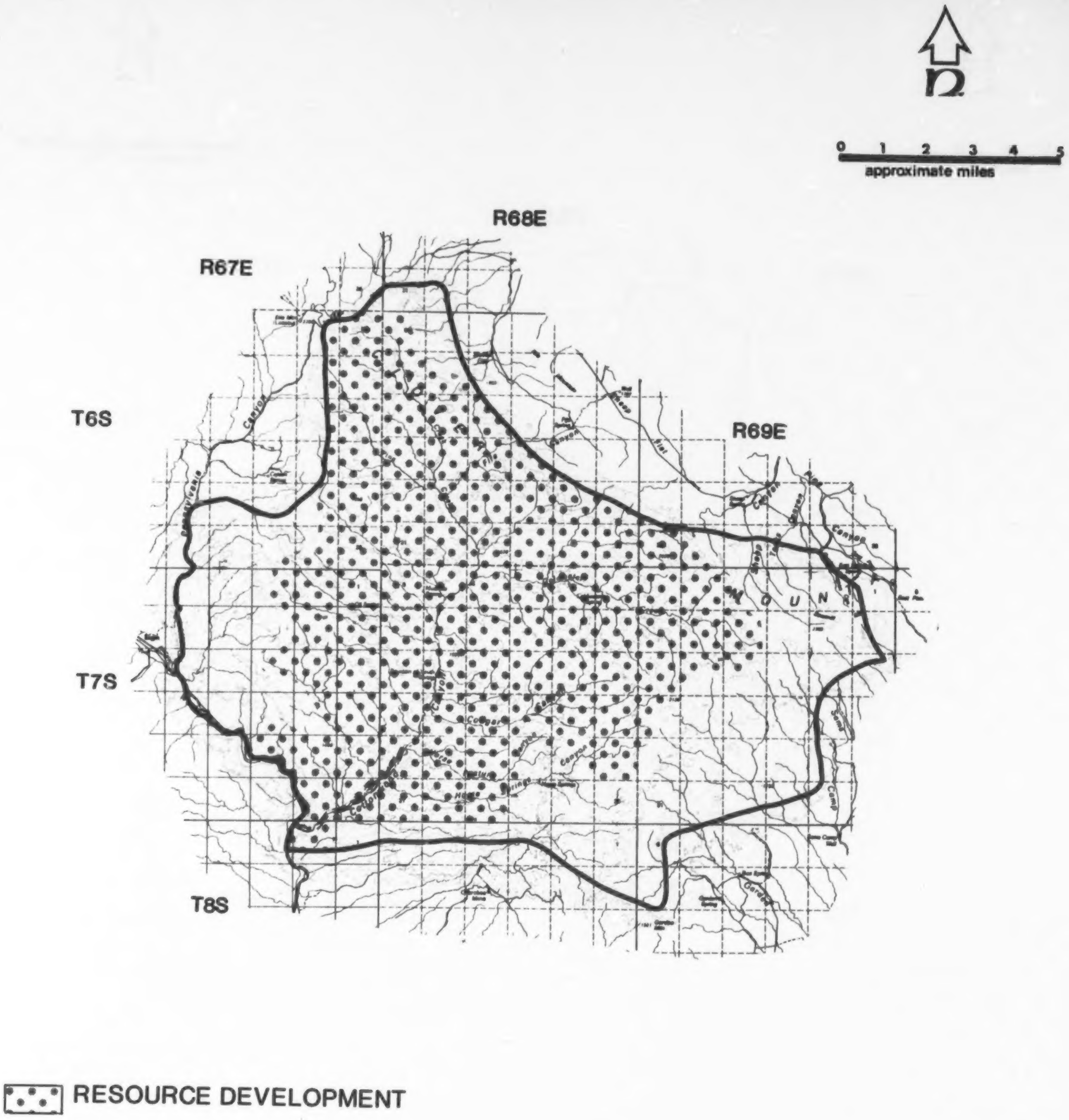
CLOVER MTNS. NV-050-0139



n
0 1 2 3 4 5
approximate miles
R68E
R67E
T6S
R69E
T7S
T8S
ALL WILDERNESS

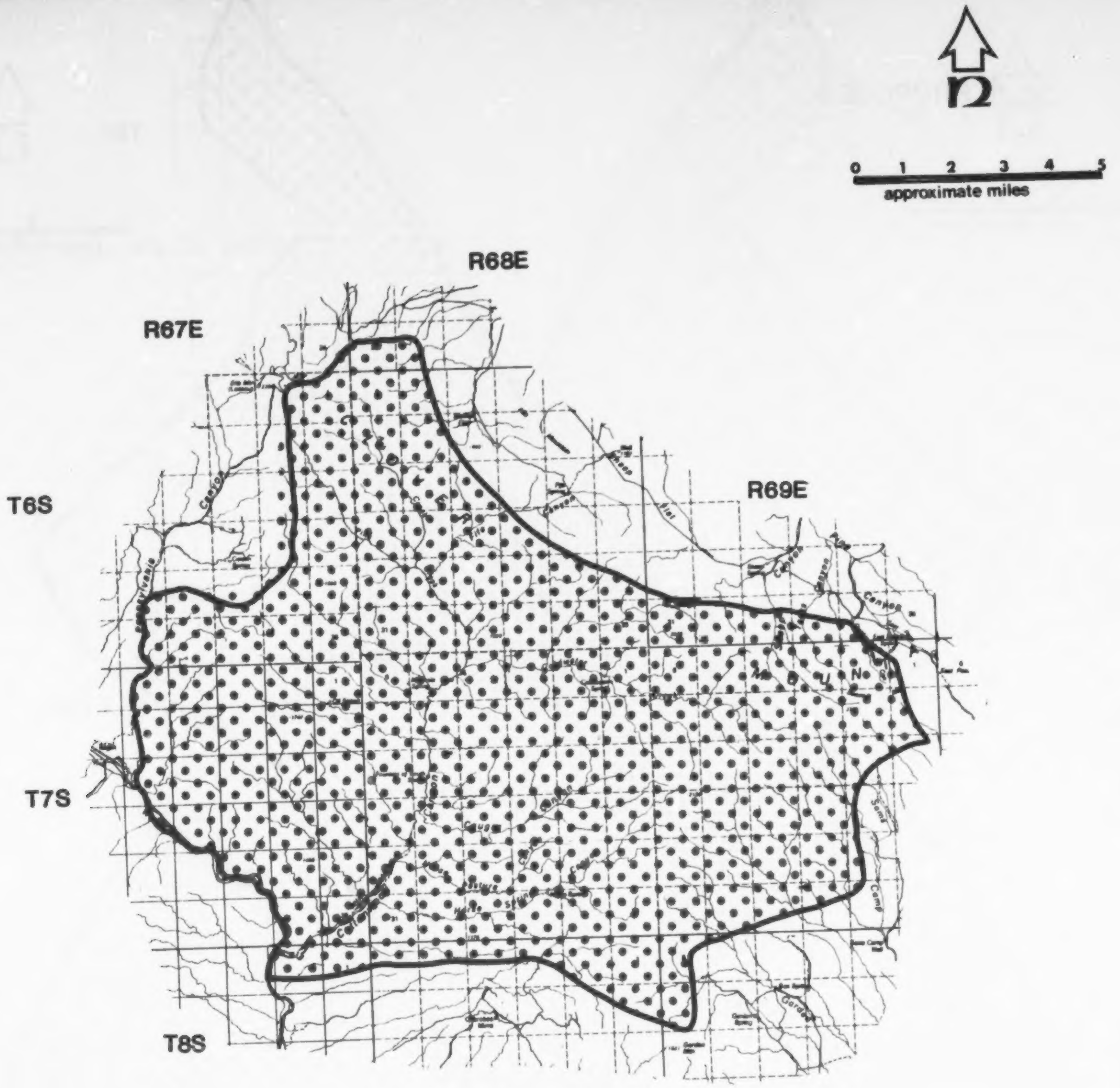
ALTERNATIVES

CLOVER MTNS. NV-050-0139


N
0 1 2 3 4 5
approximate miles
R68E
R67E
T6S
R69E
T7S
T8S
RESOURCE DEVELOPMENT

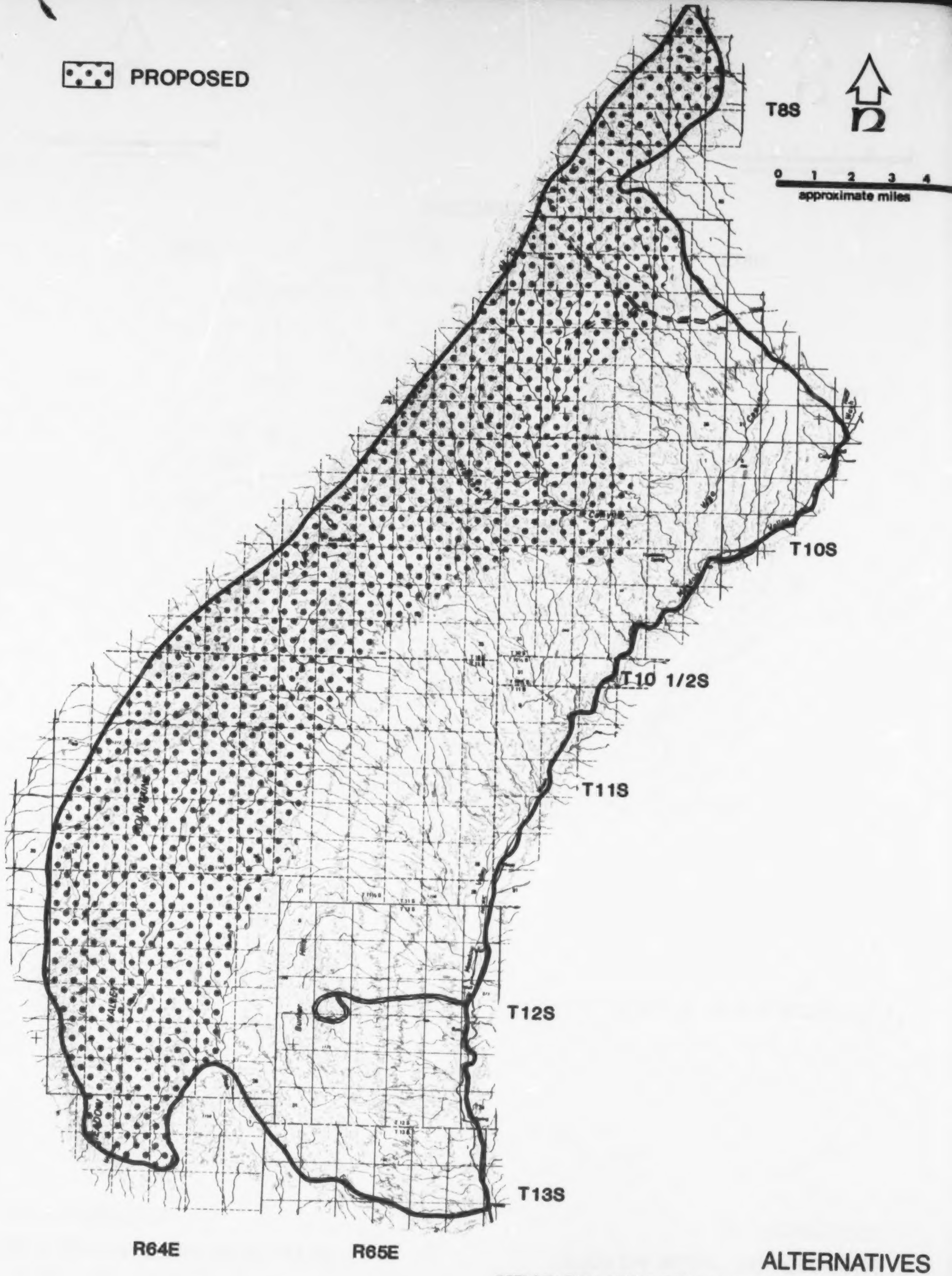
ALTERNATIVES

CLOVER MTNS. NV-050-0139

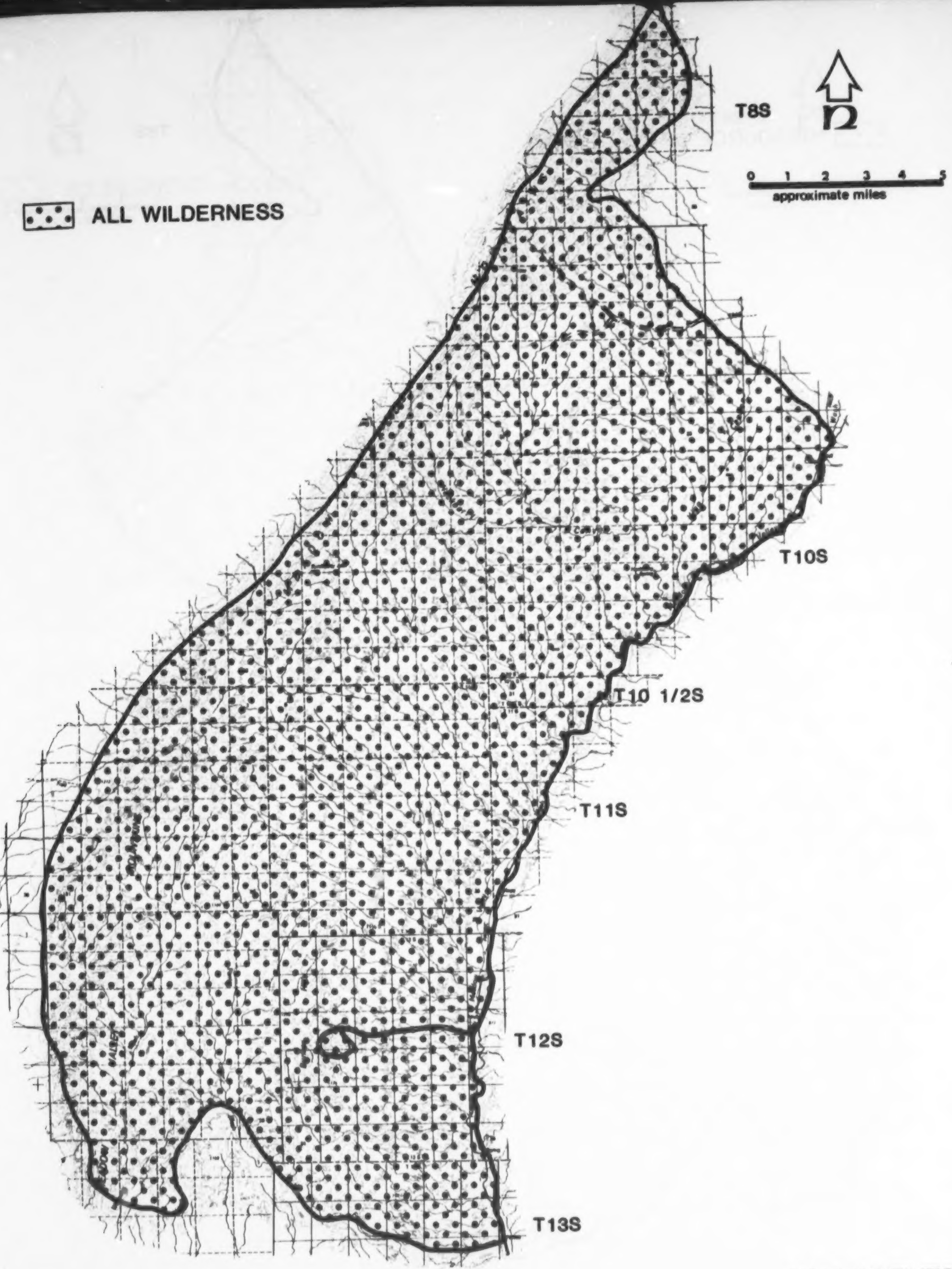

N
0 1 2 3 4 5
approximate miles
R68E
R67E
R69E
T6S
T7S
T8S

▨ WILDERNESS ACCENT

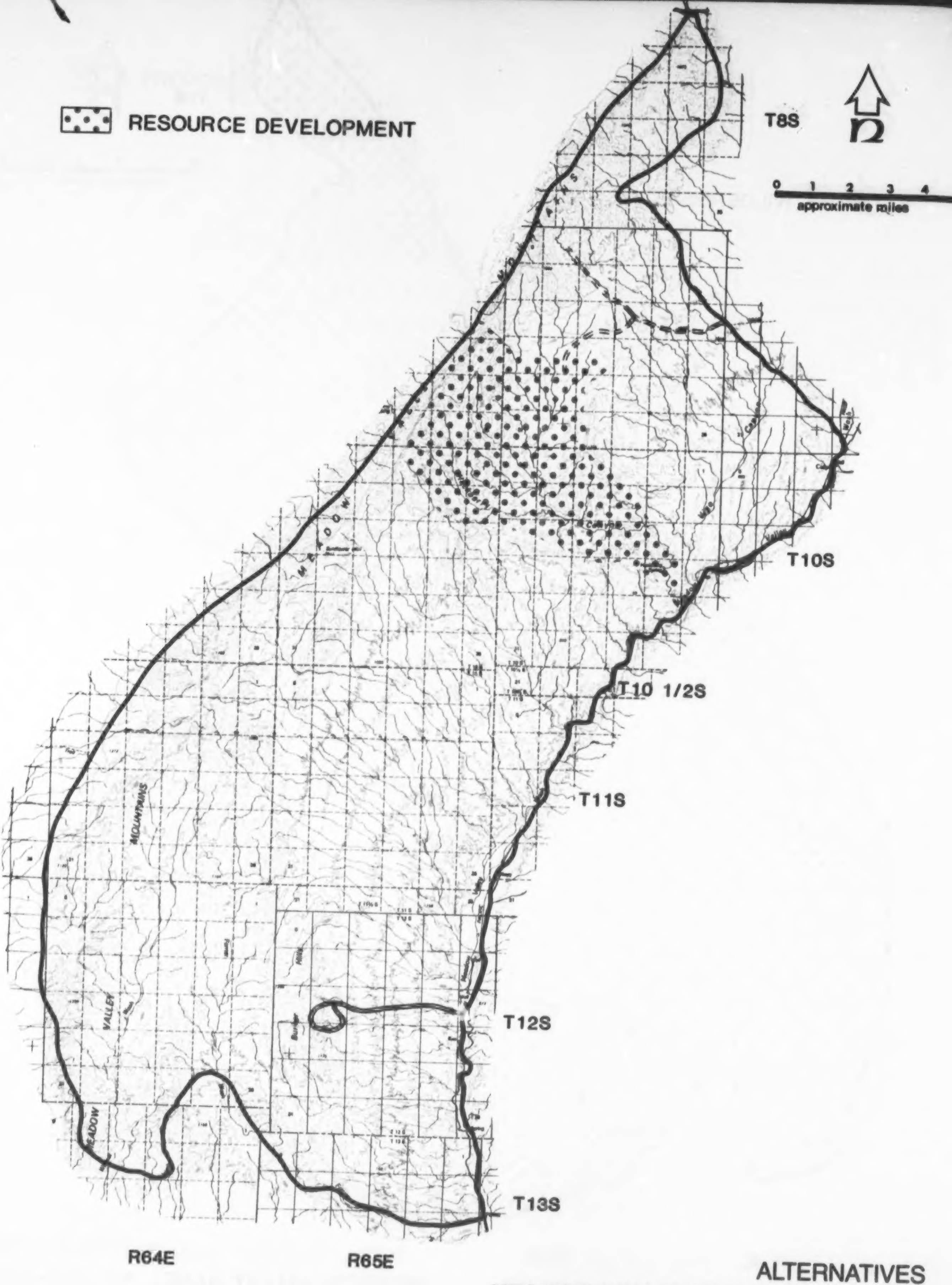
ALTERNATIVES
CLOVER MTNS. NV-050-0139


PROPOSED
T8S
0 1 2 3 4
approximate miles
T10S
T10 1/2S
T11S
T12S
T13S
MEADOW VALLEY
R64E
R65E

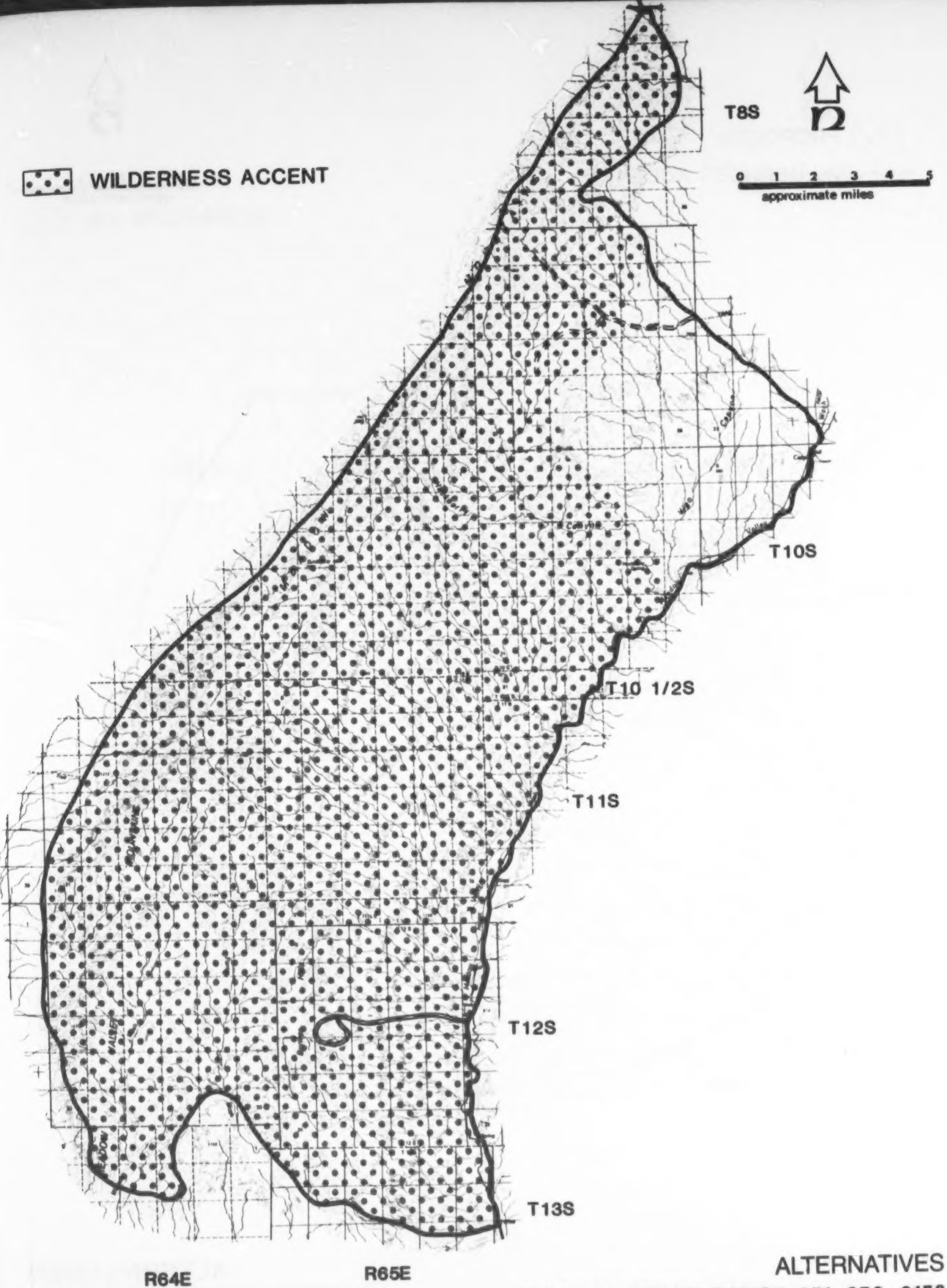
ALTERNATIVES
MEADOW VALLEY RANGE NV-050-0156


ALL WILDERNESS
T8S
0 1 2 3 4 5
approximate miles
T10S
T10 1/2S
T11S
T12S
T13S
R64E
R65E

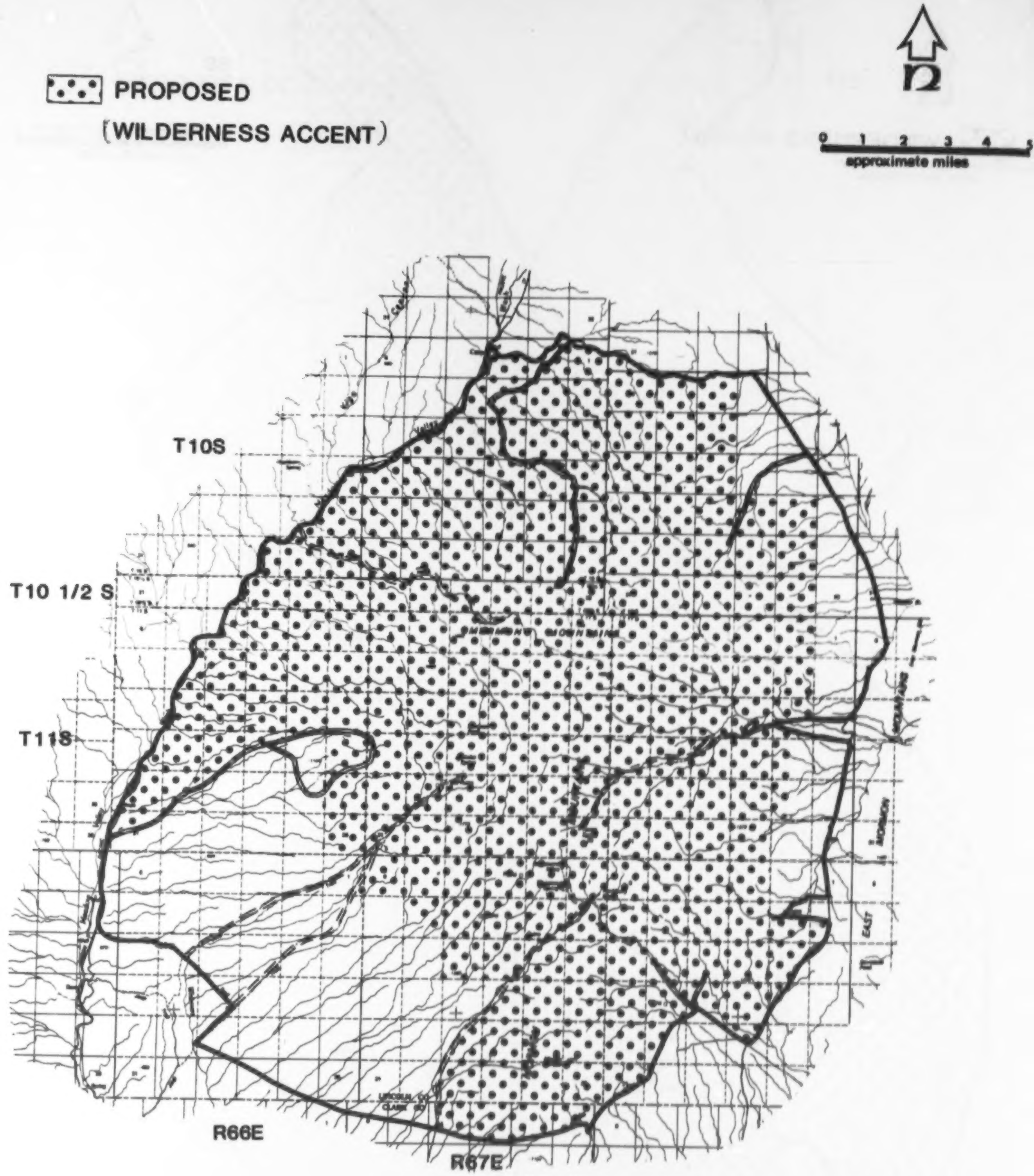
ALTERNATIVES
MEADOW VALLEY RANGE NV-050-0156


RESOURCE DEVELOPMENT
T8S
n
0 1 2 3 4
approximate miles
T10S
T10 1/2S
T11S
T12S
T13S
MEADOW
VALLEY
MOUNTAINS
MEADOW
R64E
R65E

ALTERNATIVES
MEADOW VALLEY RANGE NV-050-0156

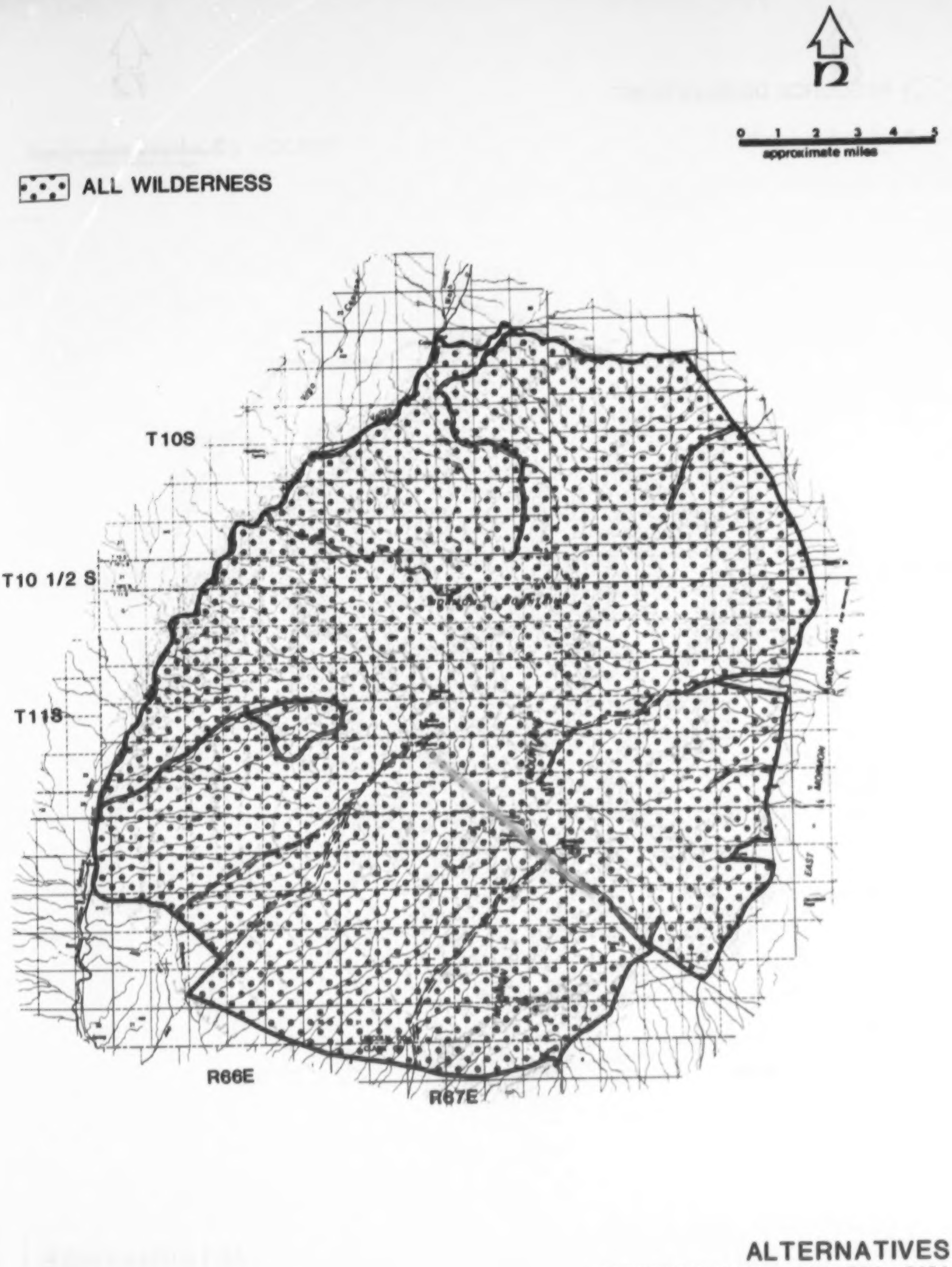

WILDERNESS ACCENT
T8S
n
0 1 2 3 4 5
approximate miles
T10S
T10 1/2S
T11S
T12S
T13S
R64E
R65E

ALTERNATIVES
MEADOW VALLEY RANGE NV-050-0156

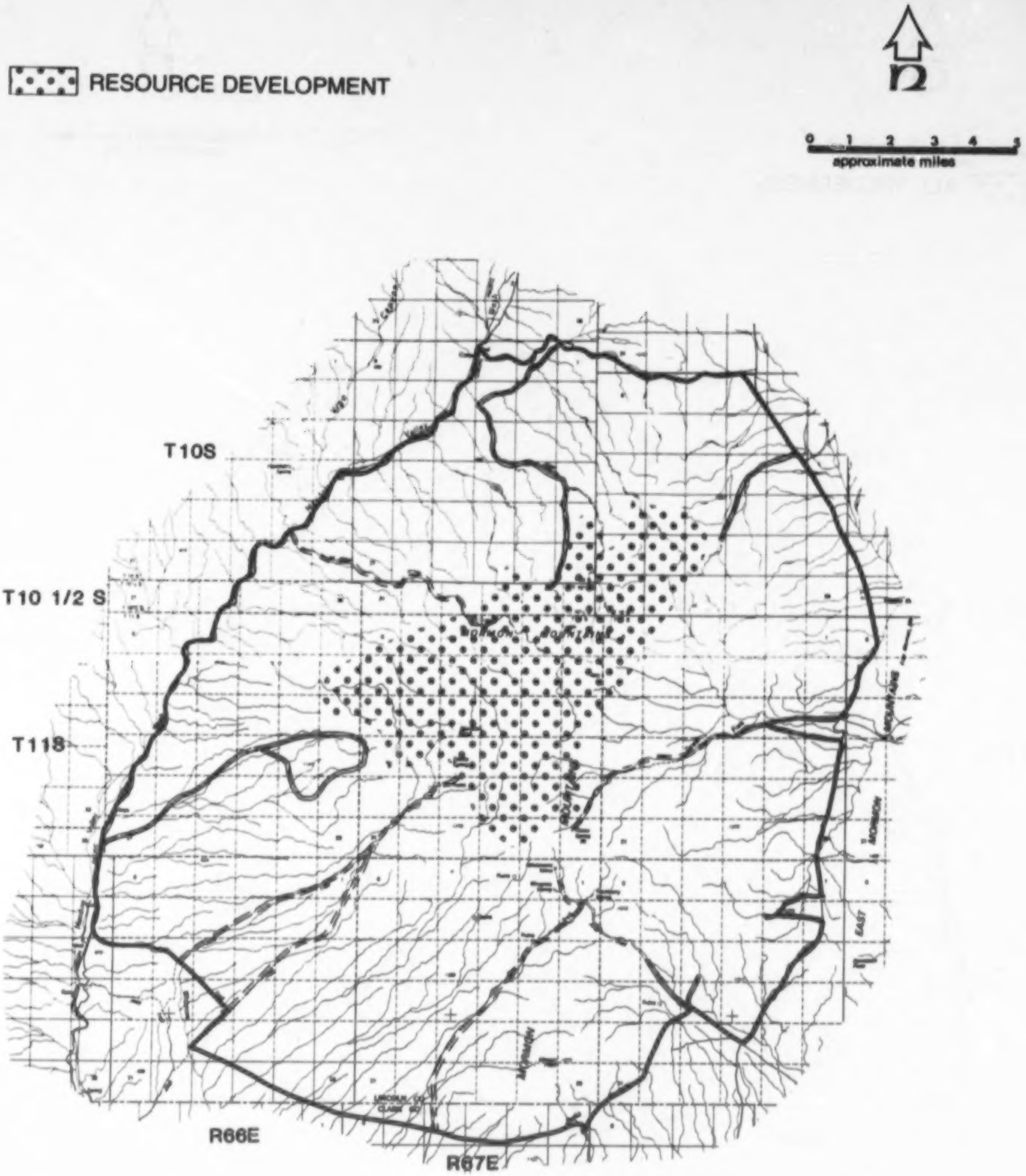


PROPOSED
(WILDERNESS ACCENT)
0 1 2 3 4 5
approximate miles
T10S
T10 1/2 S
T11S
R66E
R67E

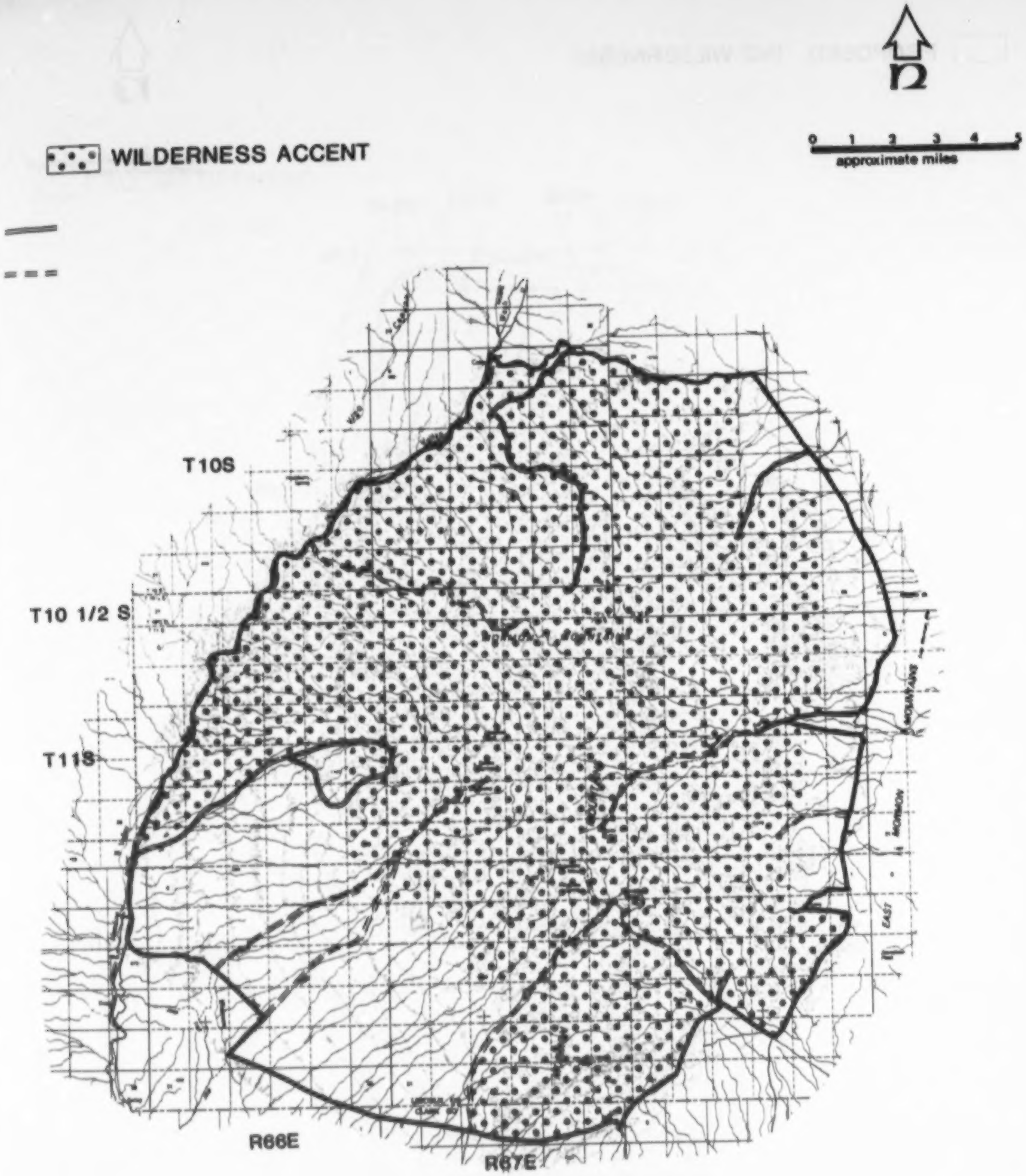
ALTERNATIVES
MORMON MTNS. NV-050-0161


N
0 1 2 3 4 5
approximate miles
ALL WILDERNESS
T10S
T10 1/2 S
T11S
R66E
R67E
EAST MORMON MOUNTAINS

ALTERNATIVES
MORMON MTNS. NV-050-0161

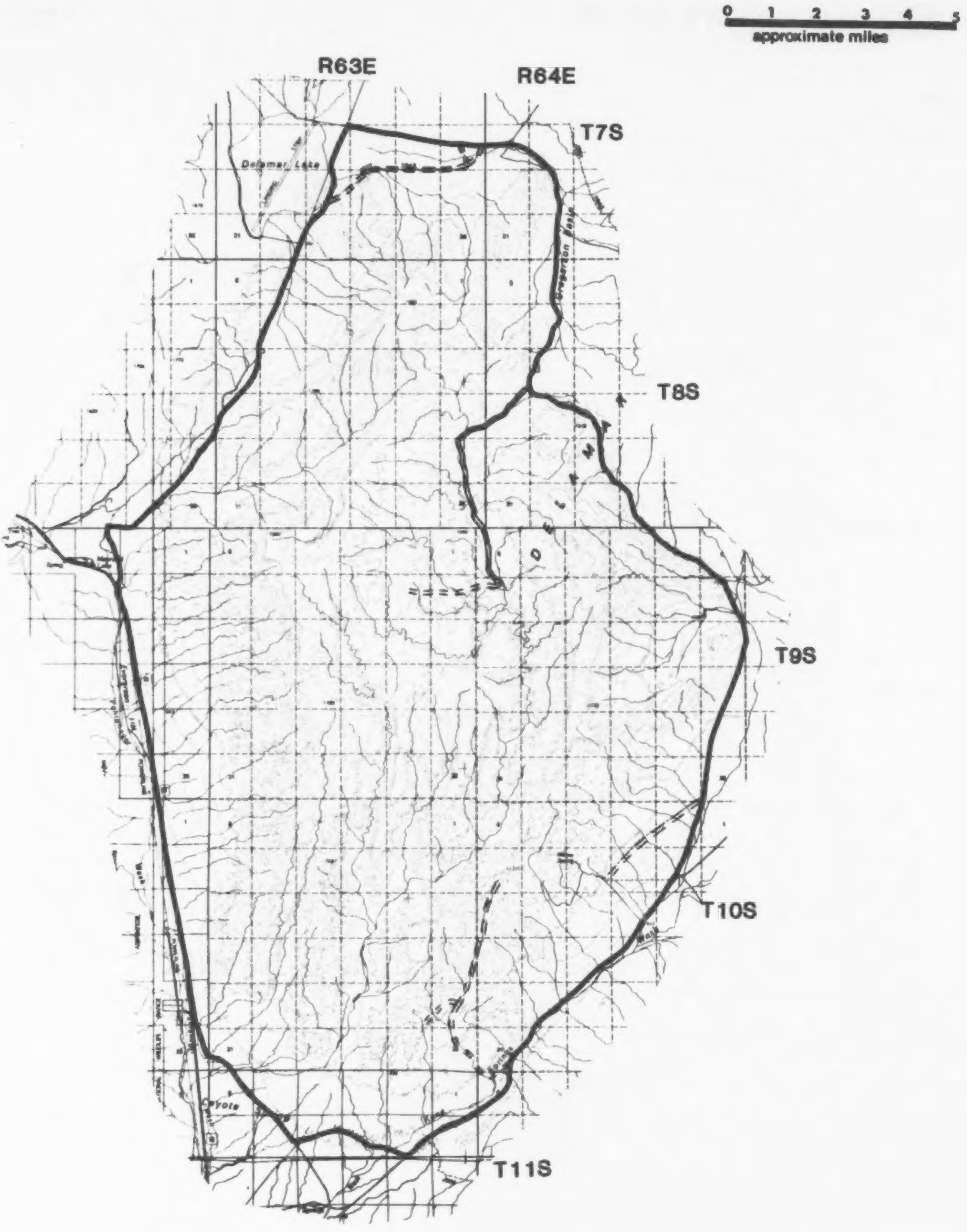

RESOURCE DEVELOPMENT
N
0 1 2 3 4 5
approximate miles
T10S
T10 1/2 S
T11S
R66E
R67E
EAST MORMON MOUNTAINS
LINCOLN CO.
CLARK CO.

ALTERNATIVES
MORMON MTNS. NV-050-0161

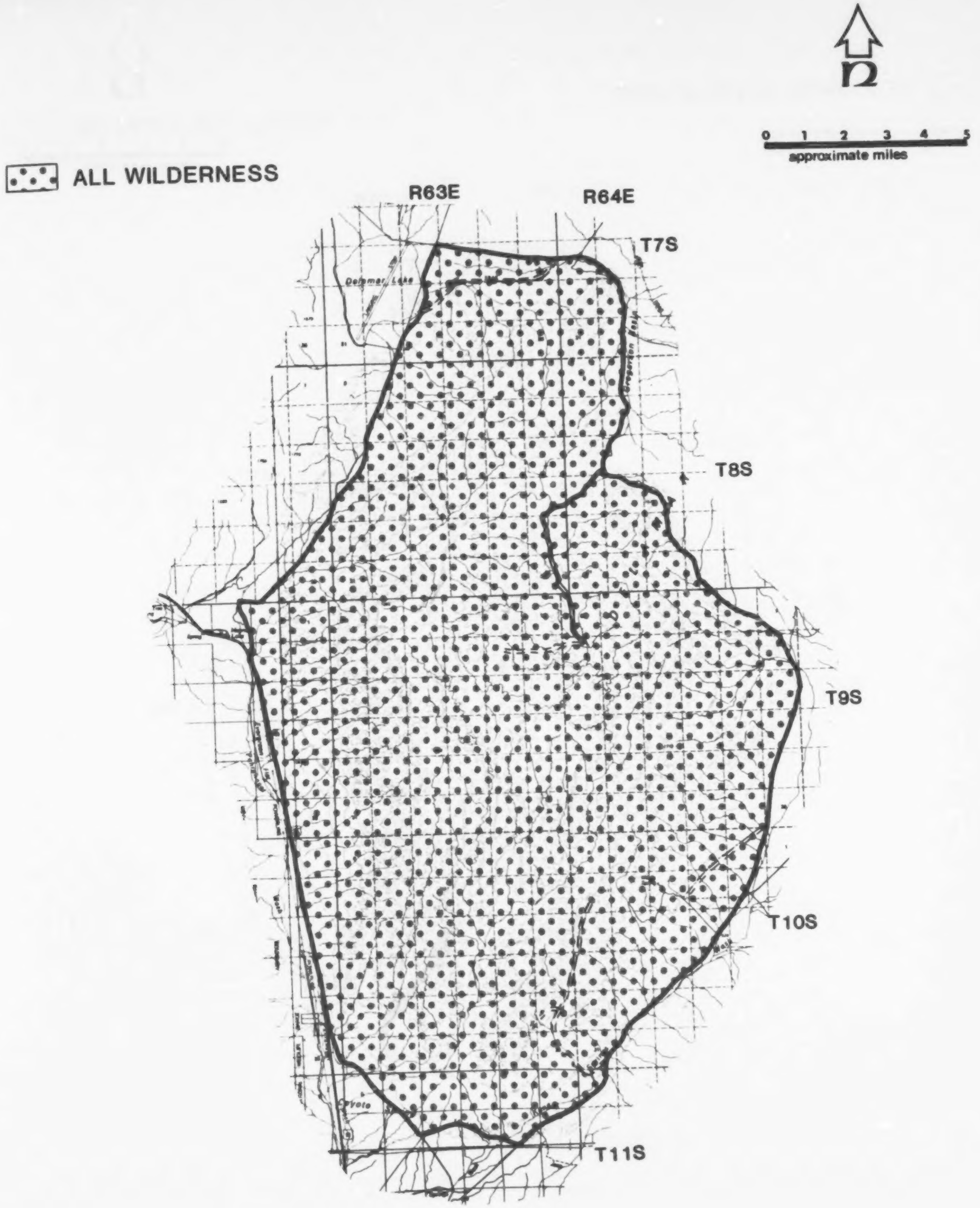

N
WILDERNESS ACCENT
0 1 2 3 4 5
approximate miles
T10S
T10 1/2 S
T11S
R66E
R67E
EAST MORMON MOUNTAINS

ALTERNATIVES
MORMON MTNS. NV-050-0161

☐ PROPOSED (NO WILDERNESS)

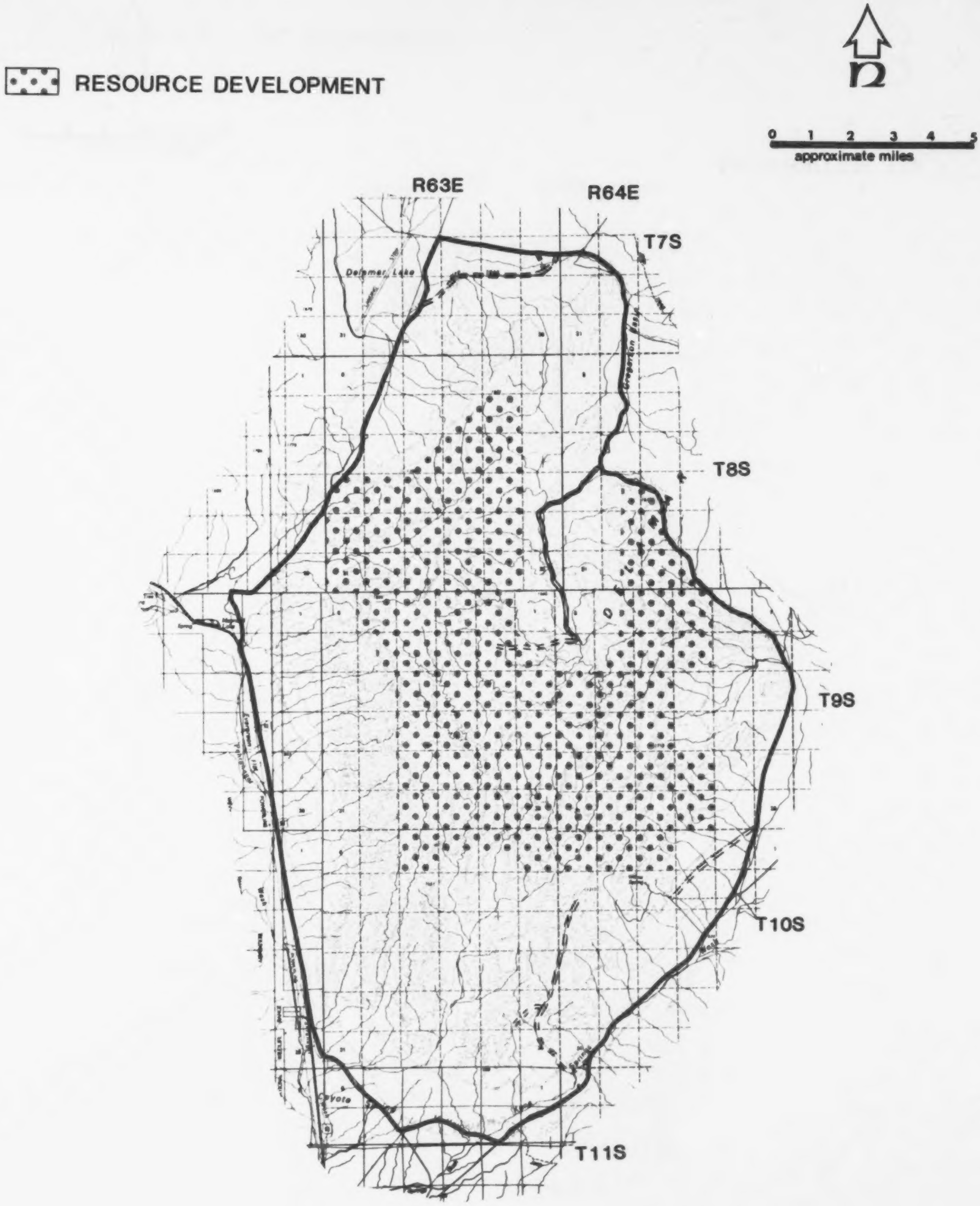

0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
T8S
T9S
T10S
T11S
Delamar Lake
Coyote

ALTERNATIVES
DELAMAR MTNS. NV-050-0177

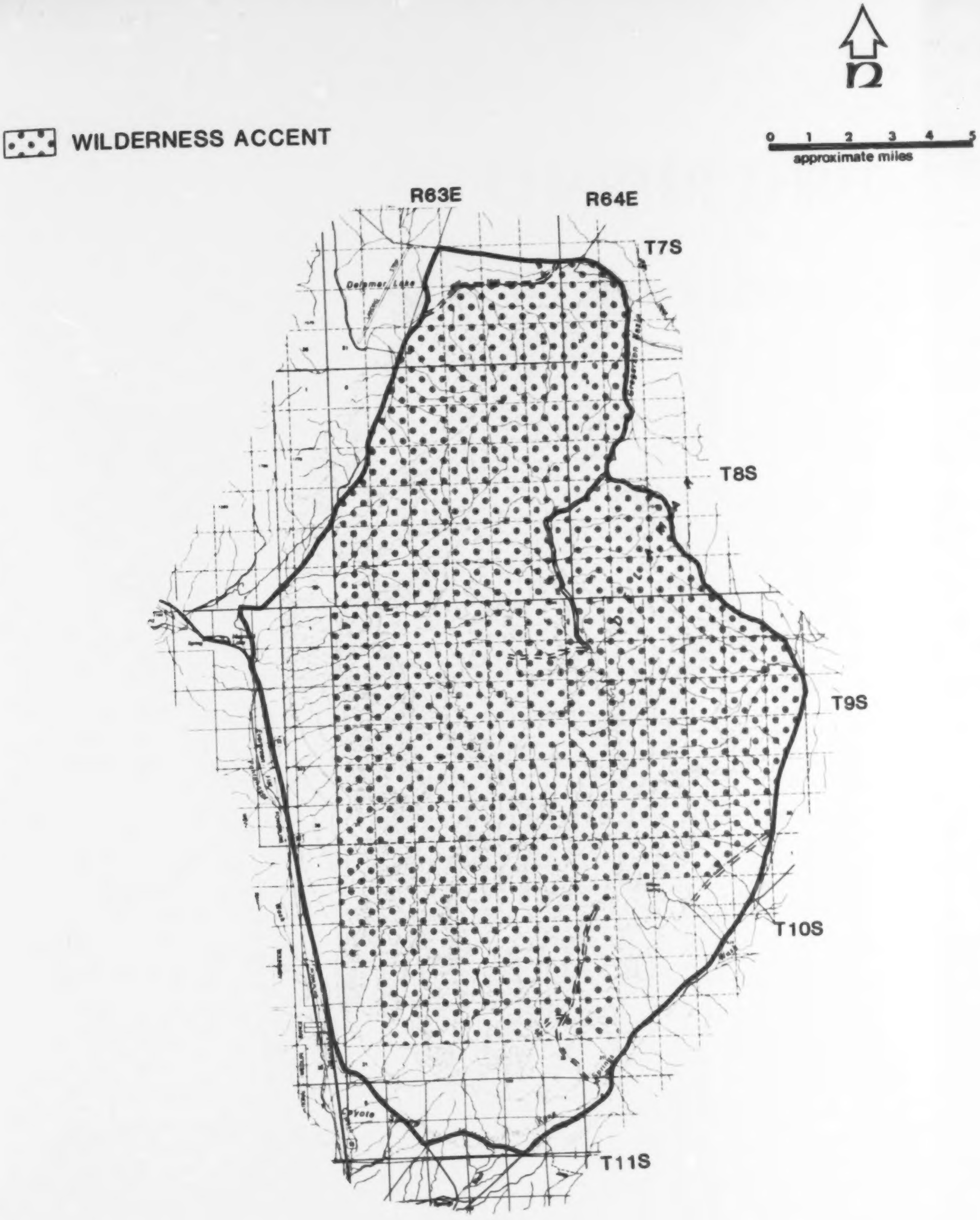

N
0 1 2 3 4 5
approximate miles
ALL WILDERNESS
R63E
R64E
T7S
Delamar Lake
T8S
T9S
T10S
T11S

ALTERNATIVES

DELAMAR MTNS. NV-050-0177


RESOURCE DEVELOPMENT
0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
T8S
T9S
T10S
T11S
Delamar Lake
Gregerson Basin
Coyote

ALTERNATIVES
DELAMAR MTNS. NV-050-0177


N
WILDERNESS ACCENT
0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
T8S
T9S
T10S
T11S
Delamar Lake
Coyote

ALTERNATIVES
DELAMAR MTNS. NV-050-0177

CHAPTER THREE

Affected Environment

CHAPTER 3

AFFECTED ENVIRONMENT

SOUTH PAHROC RANGE WSA (NV-050-0132)

General Characteristics

The South Pahroc Range WSA is located about 100 miles northeast of Las Vegas and contains the south end of the Pahroc Mountain Range. It is roughly oblong in shape, measuring two to four miles east to west and seven miles north to south. Elevation ranges from 4,900 to 7,950 feet.

There are two major landform regions within the WSA. First is the South Pahroc Range core area consisting of massive, weathered columnar fields of rounded and oblong shaped rocks ranging in size up to several yards in diameter. The second region consists of a spectacular cliff-faced escarpment on the eastern side of the WSA.

Vegetation is diverse with pinyon-juniper the most extensive type, occupying approximately seventy-two percent of the WSA and most of the core area. The eastern, western, and northern fringe areas of the WSA are dominated by big sagebrush. Southern desert shrub and salt desert shrub are found at the lower elevations. Scattered stands of white fir and aspen occur in the uplands.

Land Status

There are no private or other lands in or adjacent to this WSA. A powerline right-of-way borders the north side.

Wilderness Values

Naturalness

The vast majority of the South Pahroc WSA is in totally natural condition with approximately ninety-five percent of the WSA unaffected by manmade features. The only evidence of man is a 1.1 mile way protruding inward from the north end and two pipelines which run along the east and west border for several miles. The area's exteme ruggedness has maintained its naturalness. Outside sights and sounds are primarily restricted to the Paramount Perlite mining area located just outside the northeast boundary of the WSA. The mine consists of a small open pit and underground operations. Activity here is visible from a very small portion of the WSA. Other external effects include a powerline right-of-way, pipeline, fences, corrals, reservoir, and a large seeding. The WSA is frequently overflown by low-level military aircraft.

Opportunities for Solitude and Primitive and Unconfined Recreation

Pinyon-juniper stands offer moderate to heavy screening in the majority of the WSA. Topographic screening in the core area is outstanding throughout due to the ruggedness of the terrain. Only in rare instances does visibility exceed a few feet. The escarpment provides excellent topographic screening in every direction but easterly. Secluded areas are easily locatable in all areas of the WSA with the exception of the east side of the escarpment.

Backpacking and dayhiking are excellent throughout the WSA. Other forms of primitive recreation include rock climbing and scrambling, nature study, hunting, and horseback riding which are available through nearly all of the area. The eastern escarpment offers challenging mountain climbing opportunities. Photographic opportunities, unexpected aspen and white fir in a desert environment, and highly unusual geologic features consisting of nearly continuous cover of rounded boulders ranging in size from small to house sized, many stacked like bagels or showing face-like profiles, await the visitor to this area. Only on the small alluvial fans scattered around the edges of the WSA are these values limited. In summary, this WSA is unique within the Caliente Resource Area in the sense that it is an "island in the sky" with vast opportunities for primitive and unconfined recreation.

Special Features

This WSA offers a prime example of spheroidally weathered welded-ash tuffs looking much like granite boulders. Several stands of white fir and recently discovered aspen stands are found in the WSA and are of regional importance due to their scarcity. This area supports mule deer and the northern spotted bat (classified "rare" by the State) may exist in the WSA. This WSA is archeologically sensitive due to the presence of prehistoric sites and its proximity to available waters.

Recreation

There are no developed recreation facilities within or adjacent to the WSA. Use is very light and by individuals or family groups, with occasional organized group use. Motorized recreational use is estimated at fifty visitor-days annually and non-motorized recreational use at forty visitor-days annually. With the exception of a short way extending 1.1 mile south from the north boundary and approximately one-quarter mile penetration up two washes on the southwest, there is no motorized use in the WSA. The only land flat enough for ORV potential use is on the limited bajadas of the north, southwest and south.

Bird hunting takes place from road heads at springs along the WSA boundaries and provides an estimated forty hunter-days annually.

Cultural Resources

Little information is available relative to cultural resources in this WSA. Only eight sites have been identified, but the area is considered archeologically sensitive. Known sites include open lithic scatters, rock-shelters, temporary camp sites and milling sites.

Energy and Mineral Resources

The following list and description of energy and mineral resources are categorized according to method of acquisition or disposal (i.e., locatable, leasable, or salable) and are ordered according to the classification scheme described in Appendix Tables 3-1 and 3-2.

The only potentially economic minerals present in this WSA are sand and gravel and perlite. Sand and gravel are found around the fringes of the WSA and may be usable for highway repair. An occasionally operating perlite mine lies adjacent to the WSA's northeastern side and about 170 acres of pre-FLPMA mining claims lie in the WSA near this mine.

Locatable Minerals

Perlite exists in abundance along the northeastern flank of the WSA but with minor market demand (Group-4 commodity in Class-2 area). These resources occur adjacent to the currently mined Paramount Perlite Co. deposit which is exterior to the WSA and is the only currently producing Class-1 deposit in the Caliente Planning Unit. Other perlite resources may occur to the south along the same range front (Class-3 area). Paramount Perlite operates sporadically as orders are received. The mine consists of a cleared and leveled equipment storage area, some small open pits and an underground operation. All workings except possibly a portion of the underground operation are external to the WSA. Uranium possibly exists in the WSA, but the known data are unqualified for use in classification of potential (Group 1 & 3 commodity in a Class-4 area).

Leasable Minerals

There has been no hydrocarbon production from this WSA and no exploratory drilling. Post-FLPMA leases extend a short way into the western side of the WSA from Six-mile Flat.

Oil and gas may exist at depth within this WSA. The area was classified by the U.S. Geological Survey as having potential for speculative oil and gas resources, but there is a lack of qualified available data (Group-1 commodity in Class-4 area). Geothermal resources probably do not occur in this WSA, although there are no data to verify this (Group-1 commodity in Class-4 area). The U.S. Geological Survey has not classified this area as prospectively valuable for geothermal resources.

Salable Minerals

Sand and gravel resources exist in abundance within alluvial fan areas but with a minor market demand, (Group-4 Mineral, Class-2 Area). Other common variety minerals may exist in unknown quantities in the core areas (Group-4 in Class-3).

Livestock Management

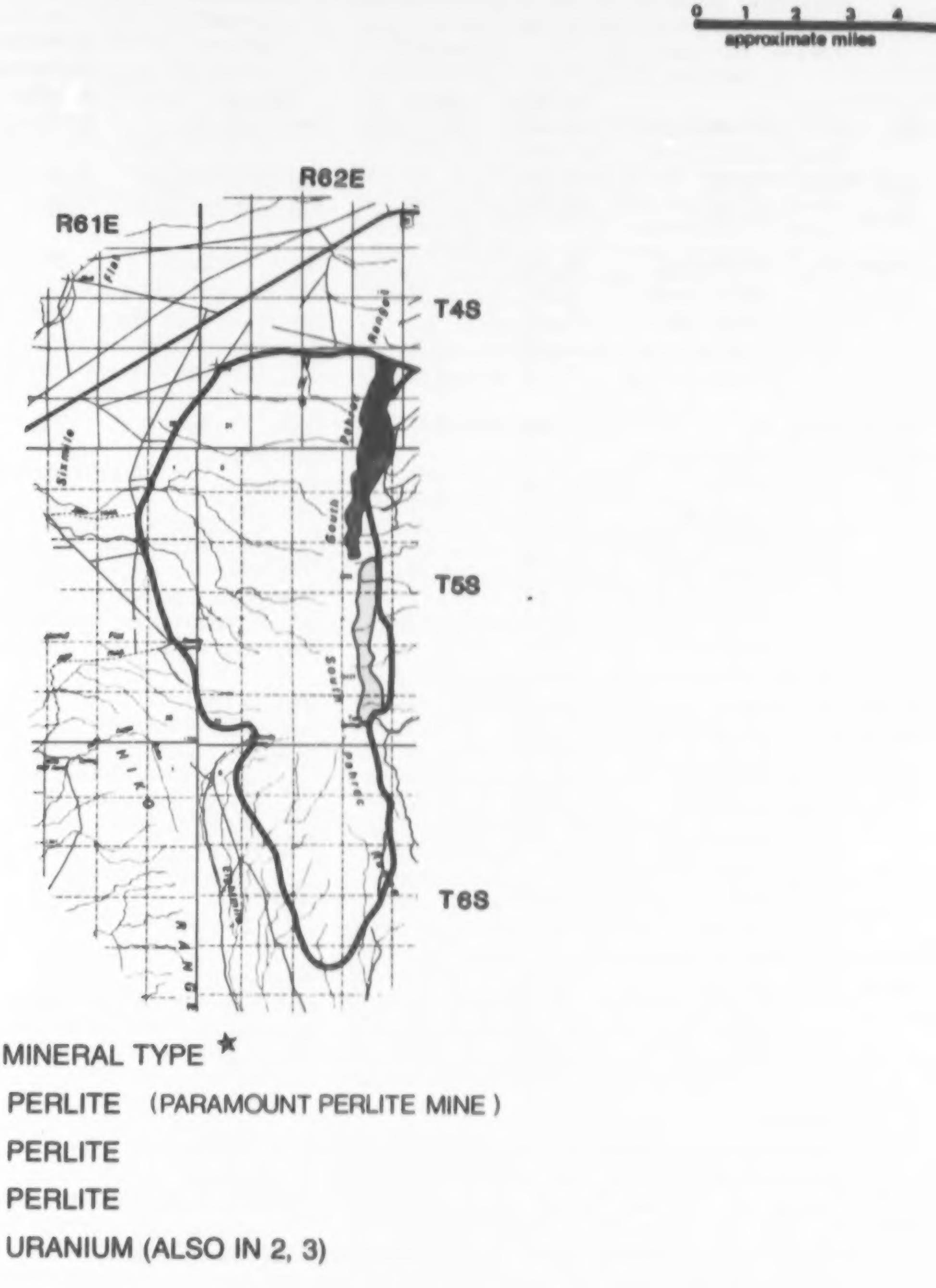
Parts of two allotments overlap the WSA and the portions within it produce an estimated use based on pro-rating of 5,569 AUMs. This estimate is undoubtedly high because the portions of the allotments within the WSA are mostly unwatered, steep and rocky. Table 3-1 contains the acreage and AUMs pertaining to the WSA. The AUM harvest from the WSA is probably overestimated, but the data are not refined enough to derive a better figure. Because of steep, rough, unwatered terrain, very little grazing benefit is actually contributed from within the WSA. Both allotments have been identified through Coordinated Resource Management Planning (CRMP) as needing an AMP. There are no range developments within the WSA nor have any been identified for the future.

TABLE 3-1

LIVESTOCK GRAZING USE IN WSAs

WSA	Allotment(s)	Acreage in WSA	Number of Permittees	Current Period-of-Use	Approximate Active Use By WSA By Allotment[1]	Selective Management Category
South Pahroc Range	Pahroc	13,439	1	Mid Sept-Mid-June	4,783	I
	Six Mile	15,161	1	Mid Sept-Mid-June	859	I
Clover Mtns.	Cottonwood	38,820	2	May 1 - Oct. 31	810	C
	Pennsylvania	9,841	3	May 1 - Sept. 30	179	C
	Sheep Flat	31,471	3	May 16 - Sept. 15	839	I
	Henrie	3,668	2	Nov. 1 - Apr. 30	67	M
	Garden Springs	1,135	1	Oct. 16 - May 15	82	I
Meadow Valley Range	Rox	7,480	1	Sept. 1 - Apr. 4	218	C
	Acton-Farrier	8,920	1	Ephemeral*	****	---
	Delamar	12,745	1	Yearlong	295	I
	Breedlove	86,999	1	Yearlong*	666	C
	Boulder Springs	2,560	1	Oct. 1 - March 31	****	I
	Lower Riggs	2,080	2	Yearlong	220	C
	Morrison-Wengert	46,920	1	Yearlong	1,788	C
	Grapevine	4,360	2	Oct. - March	118	I
	Henrie	13,650	2	Nov. - Apr. 30	249	M
Mormon Mountain	Rox	12,162	1	Sept. - Apr. 4	355	C
	Mormon Peak	72,064	2	Yearlong***	525	C
	Gourd Spring	17,286	2	Sept. 16 - May 15	591	I
	Breedlove	20,594	1	Yearlong	158	C
	Henrie	29,932	2	Nov. 1 - Apr. 30	545	M
	White Rock	7,941	1	March 1 - May 15	695	I
	Upper Mormon Mesa	2,908	1	Ephemeral	****	---
Delamar Mountains	Delamar	83,284	1	Yearlong	1,922	I
	Buckhorn	9,805	1	Yearlong	399	I
	Lower Lake	19,984	1	Yearlong	240	C
	Grapevine	13,184	2	Yearlong	356	I

* Low Use.
** Calculated as a percent of current use as limited by permit.
*** As adjudicated but has been used March 1 to May 31 and Nov. 1 - Feb. 28.
**** Average use for last two years as a percent of allotment in this WSA.
***** Variable due to ephemeral classification.
[1] Estimate based on average acres per AUM adjudicated for the allotment adjusted by the number of acres involved in each WSA.

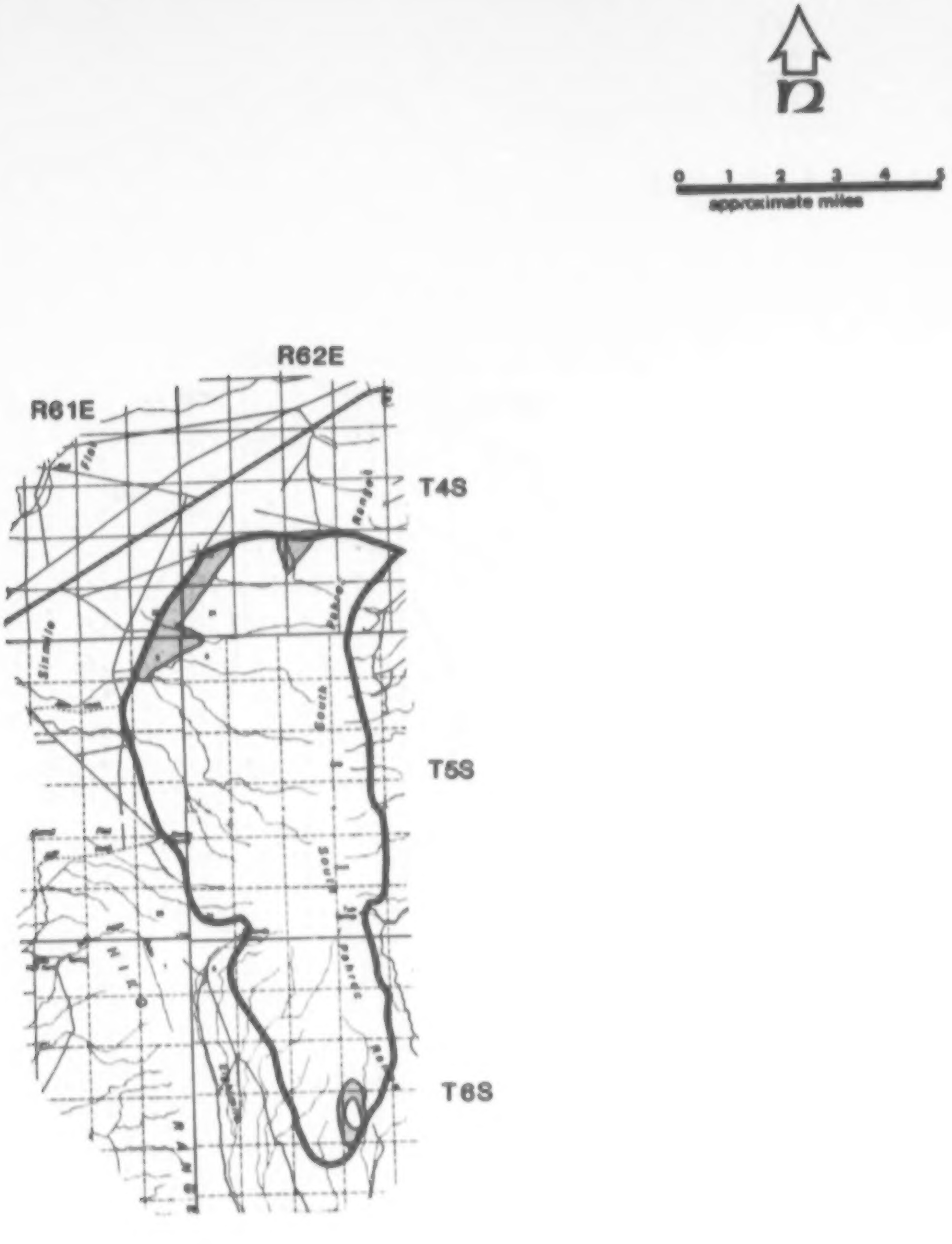

N
0 1 2 3 4
approximate miles
R62E
R61E
T4S
T5S
T6S
Sixmile
Flat
South
Pahroc
South
Pahroc
HIKO
RANGE

RELATIVE POTENTIAL	MINERAL TYPE *
▲ 1	PERLITE (PARAMOUNT PERLITE MINE)
■ 2	PERLITE
▨ 3	PERLITE
☐ 4	URANIUM (ALSO IN 2, 3)

▥ MINING CLAIMS

*REFER TO TEXT FOR EXPLANATION

LOCATABLE MINERAL POTENTIAL and MINING CLAIMS
SOUTH PAHROC NV-050-0132

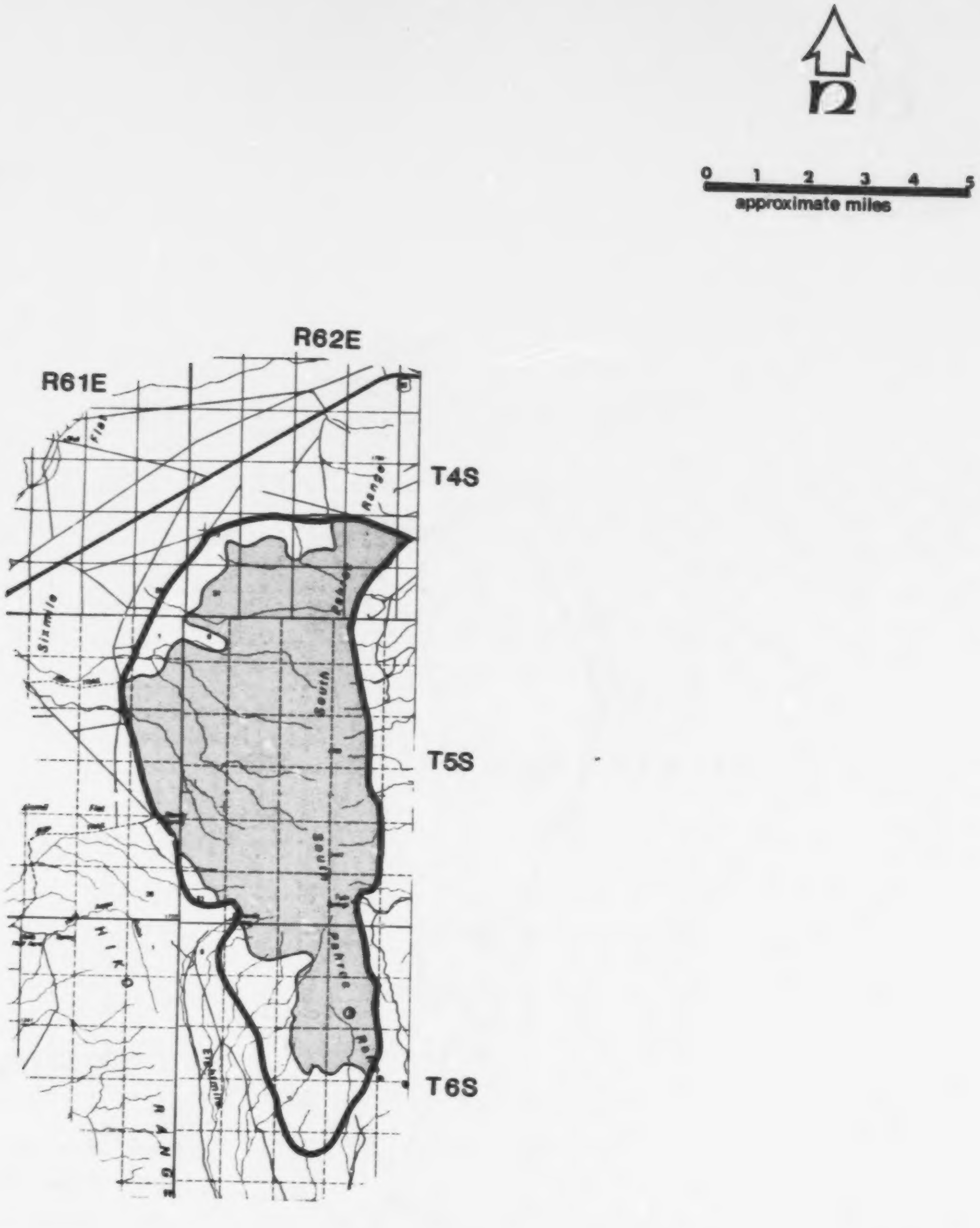

n
0 1 2 3 4 5
approximate miles
R62E
R61E
T4S
T5S
T6S
South Pahroc Range

RELATIVE POTENTIAL	MINERAL TYPE
▨ 2	SAND AND GRAVEL
☐ 3	OTHER SALABLES

SALABLE MINERAL POTENTIAL

SOUTH PAHROC RANGE NV-050-0132

*REFER TO TEXT FOR EXPLANATION


N
0 1 2 3 4 5
approximate miles
R61E
R62E
T4S
T5S
T6S
Sixmile
South
South
Pahroc
HIKO
RANGE

HABITAT

▨ DEER WINTER

PROJECTS

PROPOSED

● GUZZLER

WILDLIFE HABITAT AND PROJECTS

SOUTH PAHROC RANGE NV-050-0132

Wildlife

There is a small population of mule deer present. Prairie falcons, golden eagles and other state-protected raptors may pass through. The northern spotted bat (classified "endangered" by the State) may exist in the South Pahroc Range. Bighorn sheep were historically present and have been reintroduced. Table 3-2 shows significant wildlife habitat by WSA.

Water Resources

There are two intermittent and one perennial spring present in the WSA and their water quality is unknown. Wilderness designation would not preclude administrative action to maintain or restore potability of waters nor would it prevent projects for this reason if they prove necessary and are compatibly designed.

Air Quality

The South Pahroc WSA has a Class II rating as defined by the **Clean Air Act of 1977**.

CLOVER MOUNTAINS WSA (NV-050-0139)

General Characteristics

The Clover Mountains WSA is located about 105 miles northeast of Las Vegas, in the southern extension of the Clover Mountains. The WSA is somewhat rectangular, measuring approximately three to sixteen miles east to west and six to fourteen miles north to south. Elevation ranges from 3,000 to 7,600 feet.

There are two major landform regions found within the WSA. The first, called the Clover Mountain Central Area, consists of rugged peaks, deep twisting canyons, rolling hills, and steep cliff faces. This area contains six canyons; Cottonwood Creek, Pine Creek, Ash Creek, Fife Creek, Sheep Creek, and Coldwater Creek. The Cottonwood Creek complex, of which this WSA is a part, is significant because it is the only perennial creek system in any of the five WSAs in the Caliente Resource Area. The second region, called the Lower Clover Mountain Area, spills into the Tule Desert and contains rolling, gentle hills, less incised canyons, and the heads of several bajadas.

Vegetation is diverse. Pinyon-juniper is the most extensive vegetation type, covering approximately seventy-five percent of the area. The southeastern portion of the WSA is covered by desert shrubs, predominately blackbrush and Mexican cliffrose. The northern portion of the unit is covered by mountain shrubs consisting of Gambel oak, serviceberry, ceanothis and shrub liveoak. Most significant in the area are the riparian zones in the Cottonwood Creek complex which have scattered stands of ponderosa pine, cottonwood, willow and ash. Other portions of the WSA on the eastern side have quaking aspen.

Land Status

This WSA is composed of 84,935 acres of public land. There are no private or other lands within the WSA. The southwestern side of the WSA is bordered by the Union Pacific railroad right-of-way and some private lands.

Wilderness Values

Naturalness

Approximately ninety-five percent of the WSA is unaffected by manmade features. There is an historic homesite with an associated way, mostly washed out, in the lower region. Noticeable imprints associated with cattle use are apparent along the banks of Pine and Ash Creeks.

Outside sights and sounds are primarily restricted to the Pennsylvania Mining district on the northwestern corner of the WSA and not observable from ninety-nine percent of the WSA. Operations there are minimal presently, but activity associated with the mine could impair the quality of the wilderness experience within the northwestern corner of WSA if full scale production were initiated. A three to four mile way extends up the lower Cottonwood Wash from its mouth. There are no cherrystem roads.

Opportunities for Solitude and Primitive and Unconfined Recreation

The size of the area, in addition to vegetative and topographic screening, provides outstanding opportunities for solitude in all of the WSA, with these opportunities falling to about fifty percent in the southern quarter due to reduced topographic screening and more scattered vegetation. Secluded spots are easily locatable because of the many canyons in the WSA.

Outstanding and diverse primitive recreational activities are present. Backpacking for extended trips and dayhiking are outstanding. Other available opportunities are rock scrambling, nature study, excellent photography, horseback riding and hunting. The Clover Mountains unit is the prime mule deer harvesting unit for Lincoln County.

Table 3-2
SIGNIFICANT HABITAT BY WILDERNESS STUDY AREA (WSA)

	Deer						Crucial Desert Tortoise		Crucial Quail		Yearlong Bighorn		Crucial Bighorn	
WSA	Yearlong Habitat Acres	%*	Summer Habitat Acres	%*	Winter Habitat Acres	%*	Habitat Acres	%*	Habitat Acres	%*	Sheep Habitat Acres	%*	Sheep Habitat Acres	%*
Clover Mountains			3,796	7.0%	23,079	5.1%								
Delamar Mountains	54,133	7.0%					11,092	23%	1,250	1.4%	27,454	14%		
Meadow Valley Rge.	38,325	4.2%							125	0.1%	62,895	32%	9,739	26%
Mormon Mountains	79,459	8.8%					6,527	14%	15,537	16.8%	77,039	39%	24,391	66%
South Pahroc Range					19,377	4.3%					19,377	10%	3,000	8%
Totals	181,917	20.0%	3.796	7.0%	42,456	9.4%	17,619	37%	16,912	18.3%	186,765	94%	37,130	100%

* Represents the percent of all of that particular type of habitat available in Caliente Resource Area
Percentages may not add exactly due to rounding.
Source: Caliente Wilderness EIS Team, 1983 and 1988.

Special Features

The following supplemental values occurring within the WSA, add to the wilderness experience within it; zoological, botanical, cultural resources and geological. Peregrine falcons (classified as "endangered" by the Federal Government) have been sighted as migrants in the area. The WSA contains a stand of quaking aspen, which is rare in this district, and several riparian zones. The change in vegetation type as one progresses from the upper end of Pine Creek to lower Cottonwood Creek, from ponderosa pine to cactus, yucca and other low desert shrubs provides an interesting transition. There is one historic cabin in this WSA relating to the early Mormon settlement of the 1860's. The geologic structure of the Clover Mountains and associated Caliente caldera is also of scientific interest.

Recreation

There are no developed recreation facilities within or adjacent to the WSA. Most use is light and by individuals or family groups. These include excellent backpacking, dayhiking, camping, horseback riding, rock climbing, nature study, and photography. Non-motorized recreation use is estimated to be 100 visitor-days annually. Cottonwood Creek and its tributaries are the most used portions of the WSA for hiking and camping because of the live water, diverse vegetation ranging from ponderosa pine to desert shrub, colorful rock formations and length of route. Quaking Aspen Spring, within the WSA on its northeastern boundary, is another popular stopping point on the East Pass Road.

Flood deposits normally block the way for vehicles to pass under the Union Pacific Railroad at the mouth of Cottonwood Creek. Flooding has also severely damaged the old way leading a few miles up Cottonwood Creek. Despite the impediments, someone occasionally digs out enough to pass a vehicle under the tracks and gain access up Cottonwood Creek. There are no other ways or roads, thus motorized vehicle use of the WSA is extremely light.

Hunting around the fringes of the WSA is probably the most common recreational pursuit and takes place from foot or horseback. It is estimated at ninety hunter-days annually. There is some trapping also.

Cultural Resources

Archeological surveys within this WSA are limited to a few project-specific surveys and thus little information is available relative to its cultural resources. Because of its water and exploitable vegetation resources, this WSA can be considered sensitive for cultural resources. Known prehistoric sites include open lithic scatters, rock-shelters and open camp and milling sites adjacent to springs. One historic site is known, the cabin in Cottonwood Canyon which is related to the Mormon settlement of the 1860s.

Energy and Mineral Resources

The following list and description of energy and mineral resources are categorized according to method of acquisition or disposal (i.e., locatable, leasable or salable) and are ordered according to the classification described in Appendix Tables 3-1 and 3-2.

No past mineral production has occurred within this WSA. Some has occurred from areas outside but adjacent to it. There was minor production from the nearby Pennsylvania Mining district and some 770 acres of mining claims in the WSA adjacent to the district indicate continuing interest. There are no other mining claims in the WSA. The only known mineral present in this WSA of potentially sufficient quality and quantity to be marketable is sand and gravel located along Meadow Valley Wash, where it could be used locally for railroad or road repair.

Locatable Minerals

Potential barite resources may occur in unknown quantities at the Lucky Boy prospect within the southwestern portion of the Clover Mountains (Group-4 commodity, Class-3 area). Silica and lime resources may occur in the respective quartzite or carbonate rock units along the western boundary and lime resources may occur in carbonate rock units in the south-center of the WSA (Group-4 commodity, Class-3 area). Metallic resources may be inferred to occur in the western and north-central portions of the WSA (Group 1-3 commodities, Class 3 area). Other locatable mineral resources possibly occur in the northwestern and south-central portions of this WSA in areas adjacent to the Pennsylvania and Cherokee/Viola Mining districts, but there is a lack of qualified data for use in classification of mineral potential (Group-1 to 4 commodities, Class-4 areas). Other locatable mineral resources, speculatively, may exist in the remaining portions of the WSA, although there are no data to verify this (Group 1-4 commodities, Class-4 areas).

Leasable Minerals

There has been no hydrocarbon production from this WSA and no exploratory drilling. It has been entirely leased post-FLPMA. Potential alunite (alumina) resources may occur in the WSA in volcanic rocks associated with similar rocks to the east. A few years ago the area east of the WSA was under application for a potassium prospecting permit for alunite, but the application was rejected. Oil and gas resources possibly occur in the WSA. The area was classified by the U.S. Geological Survey as having potential for speculative oil and gas resources but there is a lack of qualified available data for use in classification of oil and gas potential (Group-1 commodity, Class-4 area). Geothermal resources probably do not occur in the WSA, although there are no data to verify this (Group-1 commodity, Class-4 area).

Salable Minerals

Sand and gravel resources exist to a limited extent in alluvial fan and large intermittent wash areas in the WSA, but without market demand (Group-4 commodity, Class-2 areas). Other common variety minerals may exist in unknown quantities in bedrock areas throughout the WSA (Group-4 commodity, Class-3 area).

Livestock Management

Portions of five allotments overlap the WSA. Table 3-1 contains the acreage and pro-rated AUMs derived from the WSA. Two allotments, Garden Springs and Sheep Flat, have been identified through CRMP as needing an intensive management system. All ranching access is accomplished on foot or horseback. Existing developments include: one-half mile of fence between Ash and Fife Creeks, one-third mile of fence extending southwesterly from south of Fife Spring, a cattle exclosure at Quaking Aspen Spring, a gap fence at lower Cottonwood Creek, and one developed spring above Sam's Camp. Proposed projects include five and one-half miles of fence on the northwestern side.

Wildlife

Mule deer, coyote and other common species are present. The state-listed "rare" northern spotted bat may be present. Raptors include the Federally "endangered" peregrine falcon as an occasional migrant.

The Beaver Dam HMP (N5-WHA-R24, 1976) encompasses the Clover Mountains, including the WSA. Table 3-2 shows significant wildlife habitat by WSA.

Wild Horses

The area contains approximately sixty-five wild horses and was identified, through the Caliente MFP, as needing an intensive herd management plan.

Water Resources

This WSA contains the only perennial streams among the five WSAs. Approximately three and one-half miles of Pine Creek and two and one-half miles of Ash Creek join to form Cottonwood Creek. From this confluence, Cottonwood Creek flows for approximately six and one-half miles. There are also fourteen undeveloped perennial springs, fifteen undeveloped and one developed intermittent springs within the WSA.

Water quality is generally untested but is usually unsafe for human consumption without treatment. Constituents which would likely exceed EPA drinking water standards are total coliform, fecal coliform, nitrate-nitrogen, total dissolved solids, chloride, sulfate, iron and manganese. Some of these constituents are attributable to natural water chemistry, but others are due to trampling and fecal contamination by cattle, wild horses and other mammals.

Wilderness designation would not preclude administrative action to maintain or restore potability of waters, nor would it prevent projects for this reason if they are compatibly designed.

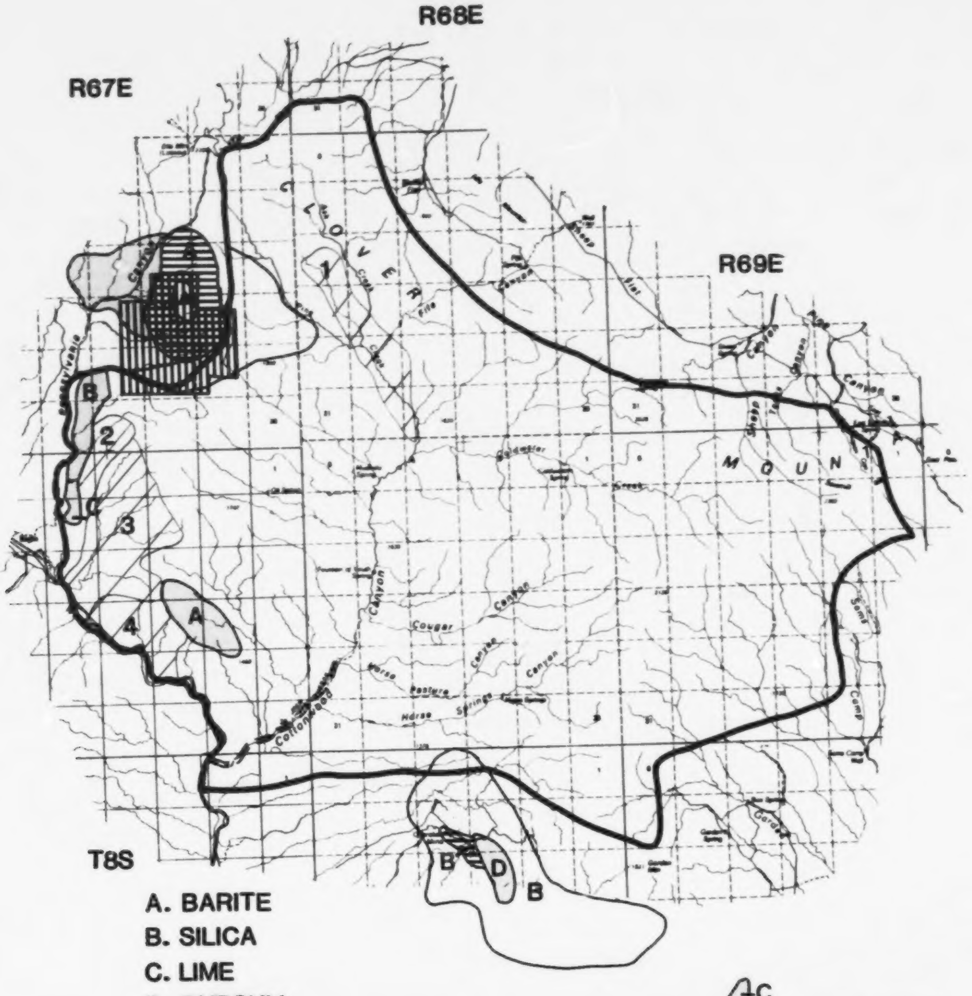
Air Quality

The Clover Mountains WSA has a Class II rating as defined by the **Clean Air Act of 1977**.

RELATIVE POTENTIAL		MINERAL TYPE ★
▲	1	PAST PRODUCTION (silver)
▤	2	MINING DISTRICTS A. PENNYLVANIA (gold, silver, copper) B. CHEROKEE C. WELLS CARGO (fluorspar)

N

0 1 2 3 4 5
approximate miles


R68E
R67E
R69E
T6S
T7S
T8S
CLOVER
MOUNT
Pennsylvania
Canyon
Cougar
Horse
Pasture
Springs
Cottonwood
A
B
C
D
1
2
3
4

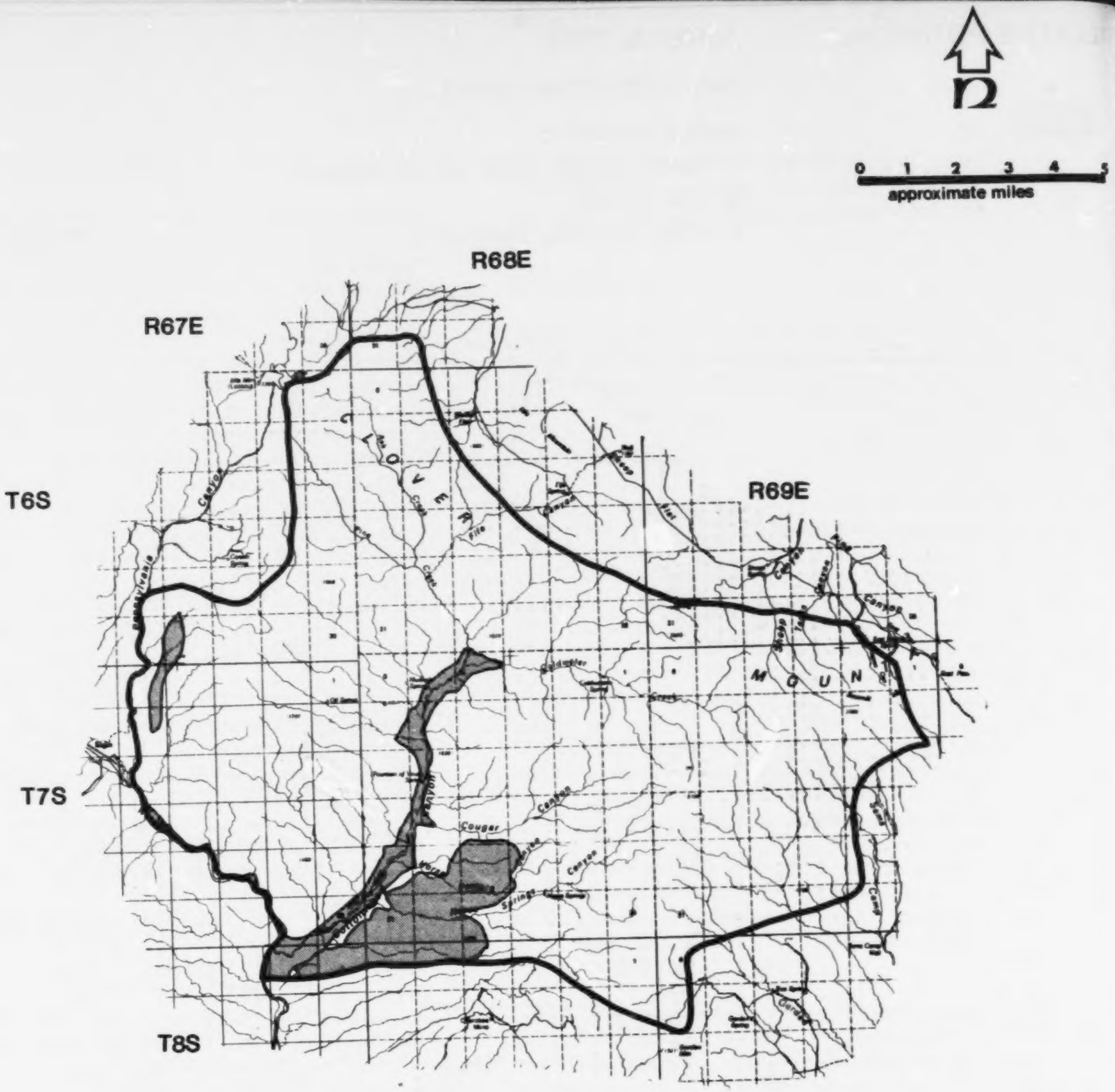
▭	3	A. BARITE B. SILICA C. LIME D. GYPSUM

C (Wells Cargo)

□	4	OTHER LOCATABLES ASSOCIATED WITH MINING DISTRICTS A. PENNSYLVANIA B. CHEROKEE/VIOLA (gold, silver, copper, lead, mercury)
▨		C. OTHER METALLICS-GEOCHEM ANOMALY 1. Tin 2. Barium 3. Barium and tin 4. Barium and strontium
▥		MINING CLAIM GROUP OVERLAPPING WSA

LOCATABLE MINERAL POTENTIAL AND MINING CLAIMS
CLOVER MTNS. NV-050-0139

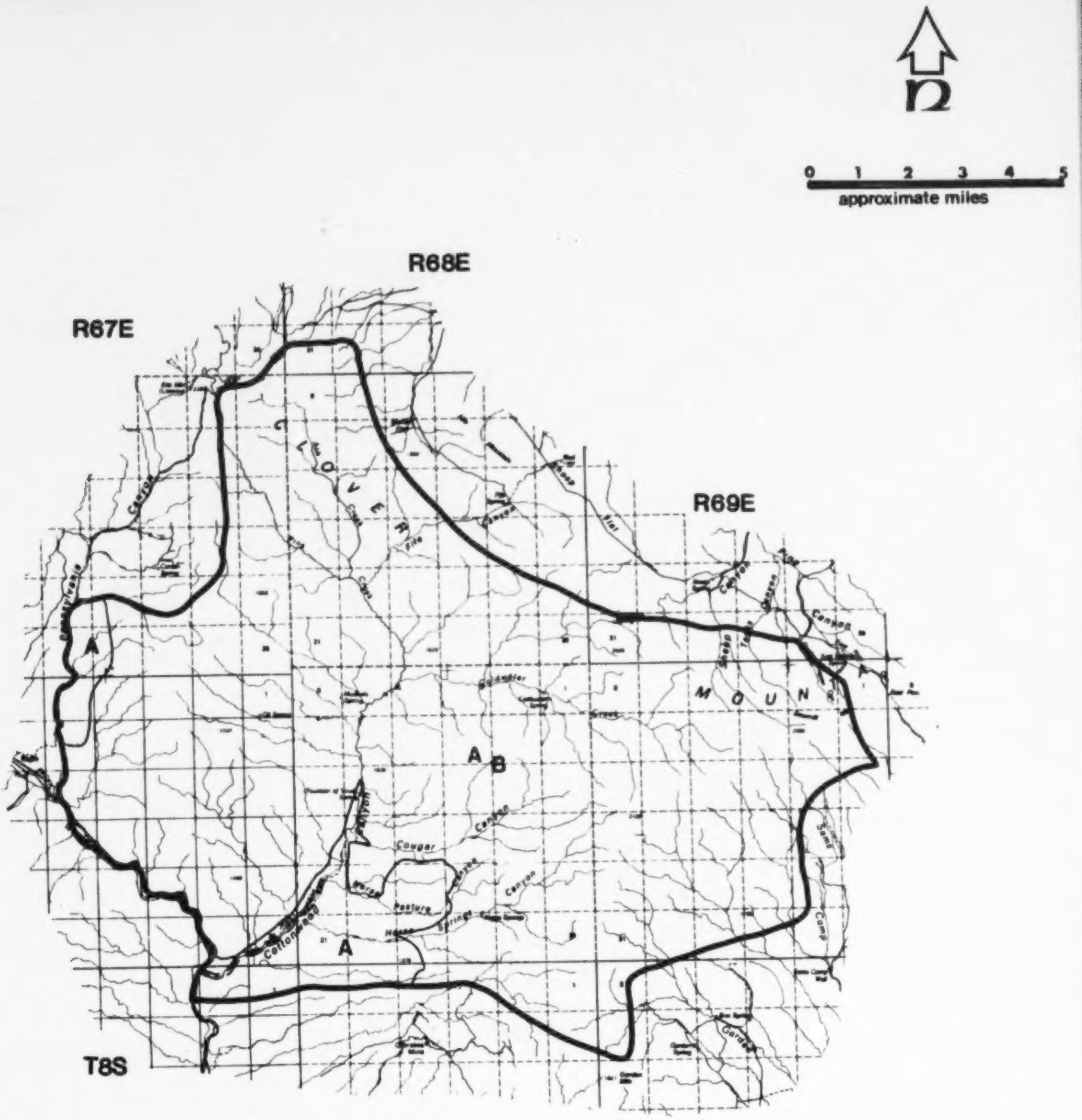
*REFER TO TEXT FOR EXPLANATION OF


0 1 2 3 4 5
approximate miles
R67E
R68E
R69E
T6S
T7S
T8S
CLOVER
MOUNT
Cougar
Canyon
Springs

RELATIVE POTENTIAL		MINERAL TYPE*
▨	2	SAND AND GRAVEL
☐	3	OTHER SALABLES

SALABLE MINERAL POTENTIAL
CLOVER MTNS. NV-050-0139

*REFER TO TEXT FOR EXPLANATION



N
0 1 2 3 4 5
approximate miles
R68E
R67E
T6S
R69E
T7S
T8S
CLOVER
MOUNT
A
A
B
A
Cottonwood
Cougar
Canyon
Pasture
Springs

RELATIVE POTENTIAL

■

☐ 4

MINERAL TYPE *

FREE USE PERMIT—SAND AND GRAVEL

A. OIL AND GAS
B. ALUNITE

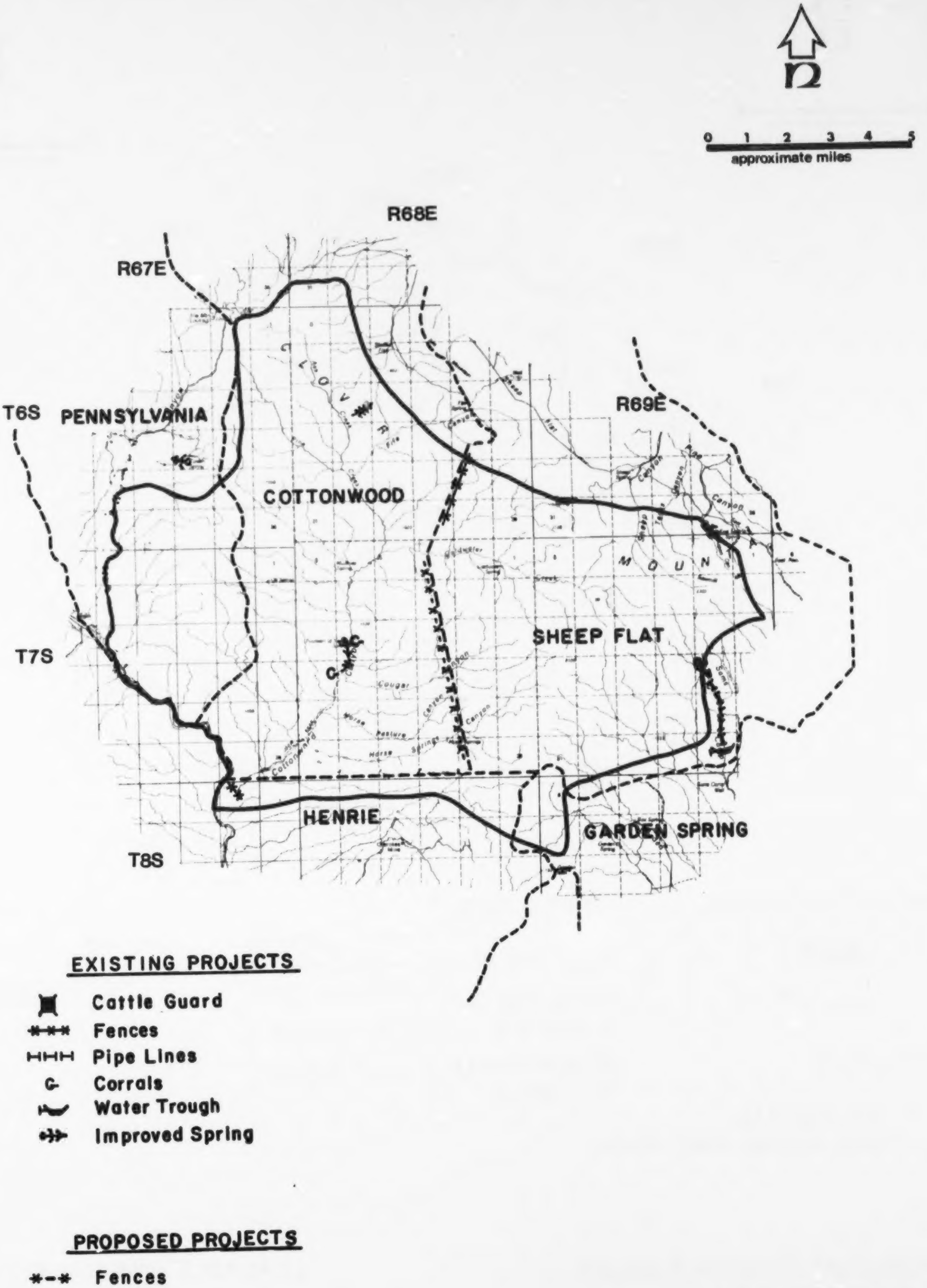
OTHER LEASABLE GEOTHERMAL
(in all areas)

OIL AND GAS
(ALL LEASED POST-FLPMA)

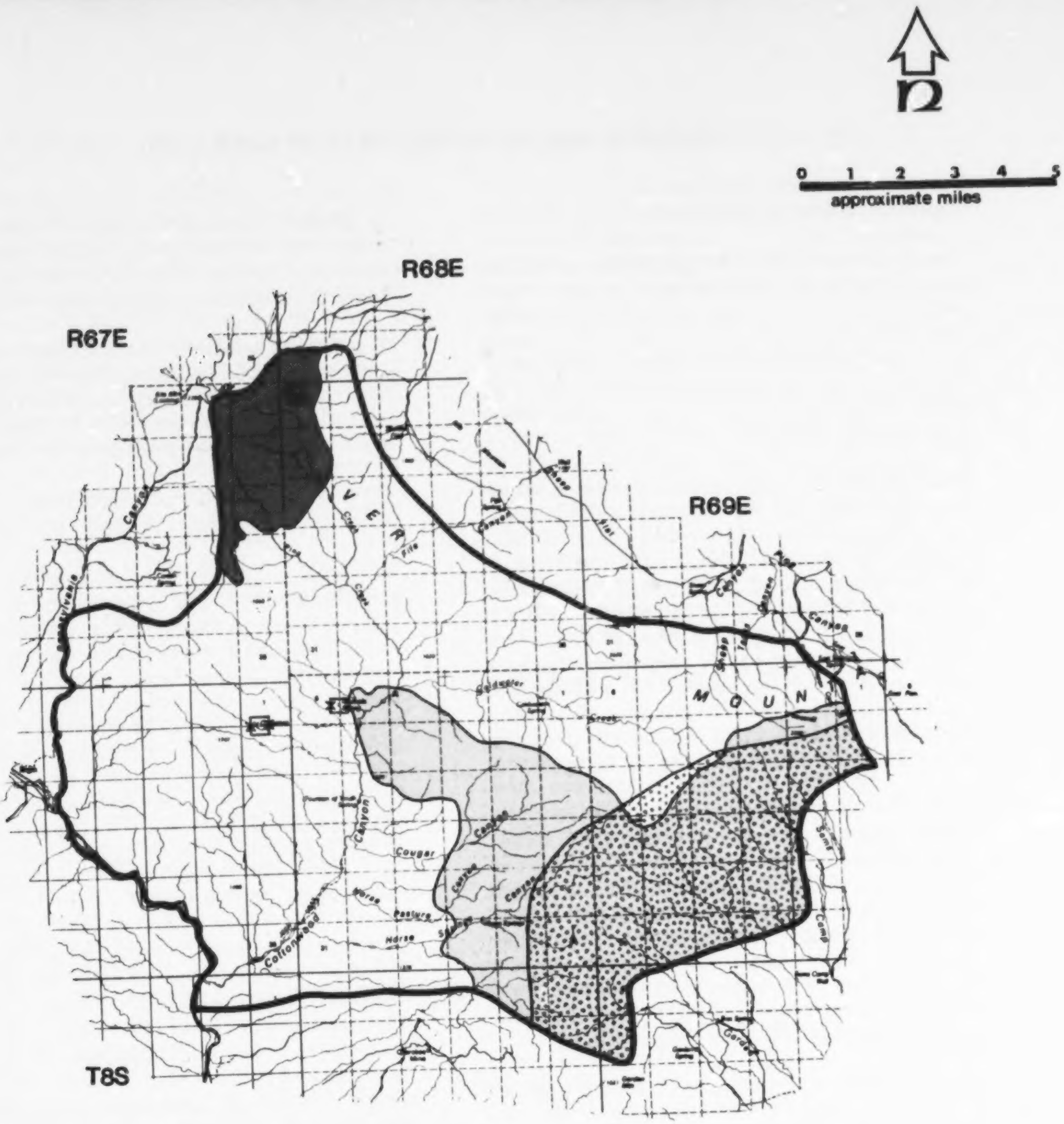
LEASABLE MINERAL POTENTIAL
OIL AND GAS LEASES

CLOVER MTNS. NV-050-0139

*REFER TO TEXT FOR EXPLANATION


0 1 2 3 4 5
approximate miles
R68E
R67E
R69E
T6S
T7S
T8S
PENNSYLVANIA
COTTONWOOD
SHEEP FLAT
HENRIE
GARDEN SPRING
C L O V E R
M O U N
EXISTING PROJECTS
Cattle Guard
Fences
Pipe Lines
Corrals
Water Trough
Improved Spring
PROPOSED PROJECTS
Fences

RANGE PROJECTS
CLOVER MTNS. NV-050-0139


0 1 2 3 4 5
approximate miles
R68E
R67E
R69E
T6S
T7S
T8S
V E R
M O U N
Cougar
Horse Pasture
Horse
Cottonwood
Canyon

HABITAT

■ DEER SUMMER

▨ DEER WINTER

PROJECTS

PROPOSED

—x— FENCE

▒ VEGETATION MANIPULATION

WILDLIFE HABITAT AND PROJECTS
CLOVER MTNS. NV-050-0139

MEADOW VALLEY RANGE WSA (NV-050-0156)

General Characteristics

The Meadow Valley Range WSA is located about fifty-five miles northeast of Las Vegas, Nevada and contains the entire Meadow Valley Mountain Range. It is shaped like a boomerang, measuring approximately eight to twelve miles east to west and arching about thirty-four miles north to south. Elevation ranges from 3,400 to 5,700 feet.

There are three major landform regions within the WSA. The first, the Meadow Valley Range, forms the northern and western sides of WSA and contains rugged peaks and canyons in limestone, dolomite, quartzite, shale and volcanic rocks. The second region, the Bunker Hills, on the southerly limb of the WSA, consists of low angular hills comprised of dissected anticlines and synclines characterized by badland-like erosion features. The third consists of a broad sweeping bajada sloping toward the east and southeast from the Meadow Valley Range.

Vegetation is diverse. The desert shrub community dominates the majority of the WSA, represented by blackbrush and Joshua trees. Lower areas of the WSA are dominated by creosote bush. Pinyon-juniper covers the higher elevations of the northernmost sections of the WSA. The major wash areas in the WSA are covered by rabbitbrush. The northwestern portion of the WSA is covered by annual grasses, mostly composed of cheatgrass.

Land Status

There are no private or other lands within this WSA. Small scattered parcels of private land abut the eastern boundary along Meadow Valley Wash. The eastern boundary also adjoins the county road and/or the Union Pacific Railroad right-of-way where the boundary is not formed by private lands.

Wilderness Values

Naturalness

Approximately ninety-five percent of the WSA is unaffected by manmade features. Most effects on naturalness occur in the WSA's northeastern corner. Here several ways cross the area from Avertt Reservoir to Hackberry Canyon. A three and one half mile way extends from the northern boundary into the upper Vigo Canyon watershed. In addition, numerous indistinct vehicle tracks cross this region of the WSA. Towards the southerly portion, there is an exploratory drill site with an associated cherrystem road.

The WSA is relatively free of outside sights and sounds. Exceptions are the WSA boundary roads, frequent low level military flights, and light pollution in the southern end from the Reid Gardner Generating Station and distant small communities.

Opportunities for Solitude and Primitive and Unconfined Recreation

Adequate vegetative screening is not available anywhere within the WSA except in pinyon-juniper areas. Outstanding topographic screening is available in the more precipitous terrain in the Meadow Valley Range region of the WSA due to a series of imposing cliffs, sharp peaks, steep canyons, and prominent rock outcrops. The Bunker Hills also provide excellent screening. The remainder of the WSA provides limited screening, but due to its vast size, provides substantial solitude. Secluded sites are easily located in the Meadow Valley Range, Bunker Hills, the region around Wildcat and Farrier Washes and in Hackberry Canyon.

Non-motorized recreational activities include outstanding primitive and unconfined recreation opportunities in the main ridge region, Sunflower Mountain and Hackberry Canyon. The Sunflower Mountain-Grapevine Spring area on the western side and and Hackberry Canyon on the east would be the focal point in providing opportunities for challenging very scenic day hikes and back packs. The entire mountain range provides good climbing and scrambling opportunities with the best being available on the western slopes of the Meadow Valley Mountains and in the large washes like Hackberry Canyon. The rugged topography, vast desert vistas, color tones ranging from very dark to sharply contrasting light buffs and lack of grazing in some areas provide excellent opportunities for photography and nature study. Potholes in ephemeral streams create intriguing temporary aquatic ecosystems. Bighorn sheep and archeologic features add both interest and photographic subjects. Horseback riding is available but better in the gentler, more easterly sections. This WSA is a good area for hunting deer and upland game birds. In addition, five desert bighorn sheep tags are issued for this area annually.

Special Features

Geological, botanical, zoological and cultural features are the WSA's most significant values. Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interresting aspect from a scientific as well as a scenic point of view. The range includes the westernmost exposure of Colorado redbeds. Two State protected plants are found in the vicinity of the WSA. They are **Arenaria stenomerees Eastwood** (Meadow Valley Range sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch). Desert tortoise inhabit the lower elevations of the southern area and golden eagles and prairie falcons may also pass through. The WSA is considered sensitive for cultural resources because of its proximity to Meadow Valley Wash.

Recreation

There are no developed recreation sites in or near the WSA. Use is very light and mostly by individuals. Occasional organized groups make use of the area. Motorized vehicle use occurs on the ways in the uplands of the Vigo Canyon drainage, in Wildcat and Farrier washes, in other washes on the south, and in Hackberry and Vigo Canyons. There is one cherrystem road which is not accessible. Non-motorized recreation use is estimated to be 100 visitor-days annually. Motorized recreation use is estimated to be 225 visitor-days, while hunting is estimated at 80 hunter-days annually.

Cultural Resources

This WSA is considered archeologically sensitive even though few prehistoric sites have been recorded. The most sensitive portion parallels Meadow Valley Wash where perennial water has wrought an area rich in cultural expressions. Found here are major concentrations of petroglyphs, rock-shelters, rock alignments, pueblo sites and aboriginal trail alignments. Rock alignments have also been found in the upper regions of the Meadow Valley Range near Sunflower Mountain. Twelve historic sites are recorded for this WSA relating to the Union Pacific Railroad and early ranching efforts in the area. Prehistoric site types expected to be found are rock-shelters, open lithic and ceramic scatters and milling sites.

Energy and Mineral Resources

The following list and description of energy and mineral resources are categorized according to method of disposal (i.e., locatable, leasable, or salable) and are ordered according to the classification scheme described in Appendix Tables 3-1 and 3-2.

The only known mineral present in this WSA of potentially sufficient quality and quantity to be marketable is sand and gravel located along Meadow Valley Wash, where it could be used locally for railroad or road repair. A few tons of gypsum were reportedly shipped from the Robb deposit along the WSA's eastern side.

Approximately 80 acres of mining claims are on the western side of the WSA and approximately 2,200 acres are on the southeastern side. All are post-FLPMA claims.

Locatable Minerals

Perlite resources are known within the northern portion of the Meadow Valley Mountains but with unknown quality and with minor market demand (Group-4 commodity in Class-2 area). Silica and lime resources may occur in respective quartzite and carbonate rock units within the southwestern and center-east portions of the WSA (Group-4 commodities in Class-3 areas). Other less known potential perlite resources may occur in association with the above-mentioned deposit (Group-4 commodity in Class-3 area). Potential gypsum resources may occur in the central-east portion of the WSA in Permian redbeds (Group-4 commodity in Class-3 area). Gypsum deposits in this WSA are nodular in nature and thus appear uneconomic. Metallic resources may be inferred to occur in the north quarter, central and extreme southwestern portion of the WSA (Group 1-3, Class 3 area). Other less known gypsum resources possibly exist in Permian redbeds within the WSA, associated with the known deposit, (Group-4 commodity in Class-4 area). Unknown locatable mineral resources possibly exist within mining claims lapping into the WSA on the central lower west flank, but no data exists (Group 1-4 commodities in Class-4 area). Potential uranium resources possibly exist in the WSA, but the known data does not verify this (Group-1 and 3 commodity in Class-4 area).

Leasable Minerals

There has been no hydrocarbon production from this WSA. There was some geophysical exploration and one deep well was drilled with no publically known results. The entire WSA is all leased post-FLPMA.

Oil and gas resources possibly occur in this WSA. The area was classified by the U.S. Geological Survey as having potential for speculative oil and gas resources but there are a lack of qualified available data for use in classification of potential (Group-1 commodity in Class-4 area). Phosphate rock resources possibly exist in unknown quantities within the Chainman Shale in the south-central portion of the WSA, but there are a lack of qualified data for use in classification of potential (Group-3 commodity in Class-4 area). Geothermal resources probably do not occur in this WSA, although there are no data to verify this (Group-1 commodity in Class-4 area). The U.S. Geological Survey has not classified the area as prospectively valuable for geothermal or other leasable minerals.

Salable Minerals

Sand and gravel resources exist in abundance within alluvial fan areas, but with minor market demand (Group-4 commodities in Class-2 area). Other common variety minerals may exist in unknown quantities in bedrock areas (Group-4 commodity in Class-3 area).

Livestock Management

Portions of nine allotments overlap the WSA. Eight of these are actively used. Table 3-1 contains the acreage and pro-rated AUMs derived from the WSA. Delamar and Grapevine allotments are currently under allotment management plans. Both allotments have developed rotational pasture grazing systems. Portions of two allotments (Boulder and Lower Riggs) have been identified through CRMP as needing formal grazing systems. Existing developments consist of a reservoir, pipeline and trough in the Delamar Allotment, one-half mile of fence between Breedlove and Henrie Allotments, a reservoir and one mile of fence in Grapevine Allotment, a developed spring and corral at Hackberry Spring in the Henrie Allotment and a spring develpoment and corral in the Morrison-Wengert Allotment.

Wildlife

Mule deer, bighorn sheep and quail are present. Golden eagles, prairie falcons and other raptors (protected by the State) may pass through or exist in the area. The northern spotted bat (classified "endangered" by the State) may exist in the WSA. A big game guzzler is the only wildlife development within its boundaries. Table 3-2 shows significant wildlife habitat by WSA.

Wild Horses

The area contains approximately thirty-three wild horses and was identified, through the Caliente MFP, as needing an intensive herd management plan.

Lands

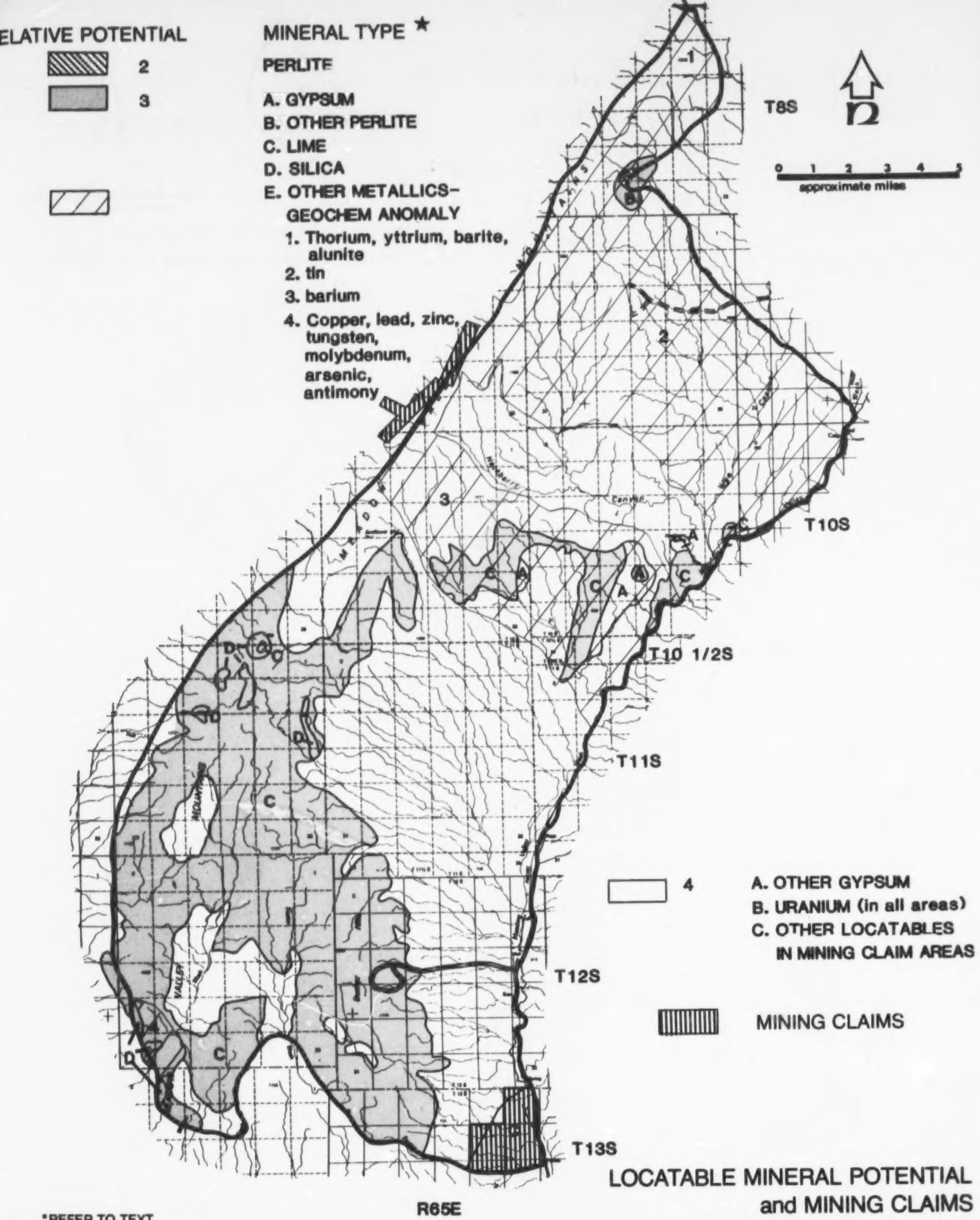
The Air Force had identified a plan to install portable electronic stations at two locations along the crest of the main ridge (37° 1' 43"N, 114° 47' 28"W and 37° 15' 15"N, 114° 35' 3"W) but alternative locations were found.

Water Resources

There are two springs present in the WSA, one perennial and one intermittent, with unknown water quality. Wilderness designation would not preclude administrative action to maintain or restore potability of waters, nor would it prevent projects for this reason if they should be necessary and if they are compatibly designed.

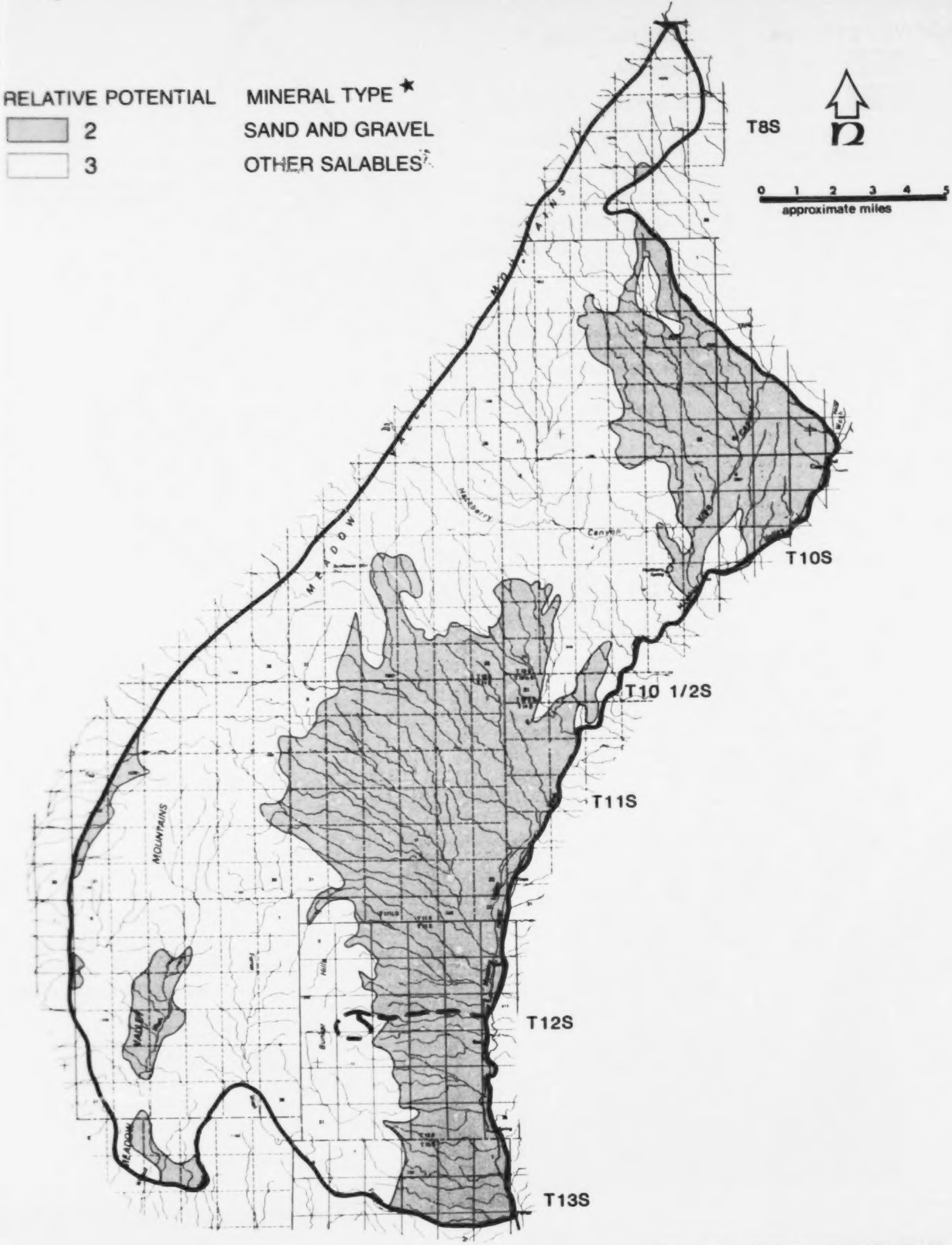
Air Quality

The Meadow Valley Range WSA has a Class II rating as defined by the **Clean Air Act of 1977**.


ELATIVE POTENTIAL
MINERAL TYPE ★
2
PERLITE
3
A. GYPSUM
B. OTHER PERLITE
C. LIME
D. SILICA
E. OTHER METALLICS-
GEOCHEM ANOMALY
1. Thorium, yttrium, barite, alunite
2. tin
3. barium
4. Copper, lead, zinc, tungsten, molybdenum, arsenic, antimony
4
A. OTHER GYPSUM
B. URANIUM (in all areas)
C. OTHER LOCATABLES IN MINING CLAIM AREAS
MINING CLAIMS
0 1 2 3 4 5
approximate miles
T8S
T10S
T10 1/2S
T11S
T12S
T13S
R65E
1
2
3
A
B
C
D

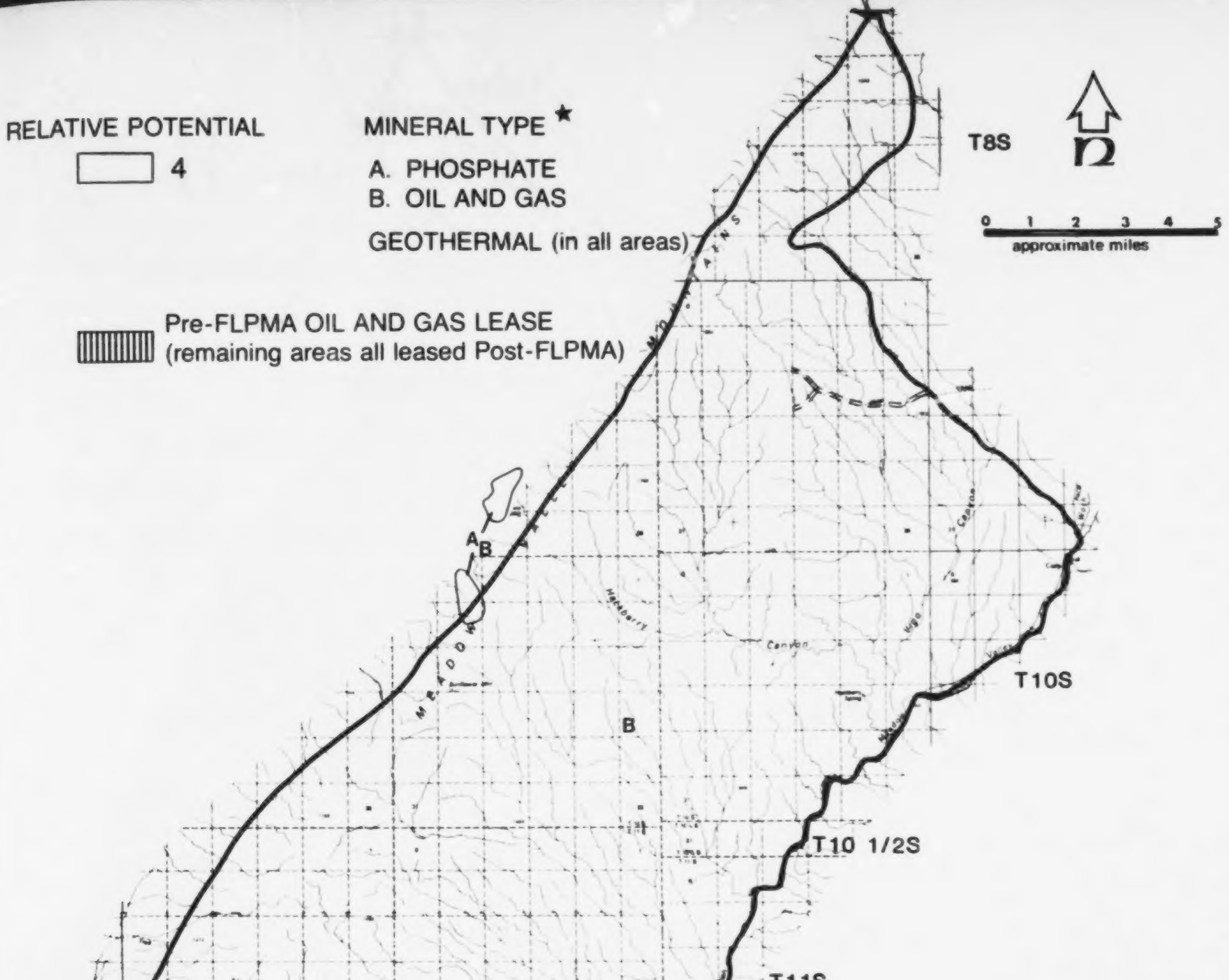
LOCATABLE MINERAL POTENTIAL
and MINING CLAIMS
MEADOW VALLEY RANGE NV-050-0156

*REFER TO TEXT


RELATIVE POTENTIAL
MINERAL TYPE *
2
SAND AND GRAVEL
3
OTHER SALABLES
approximate miles
0 1 2 3 4 5
MEADOW VALLEY MOUNTAINS
MOUNTAINS
Hackberry Canyon
T8S
T10S
T10 1/2S
T11S
T12S
T13S
R64E
R65E

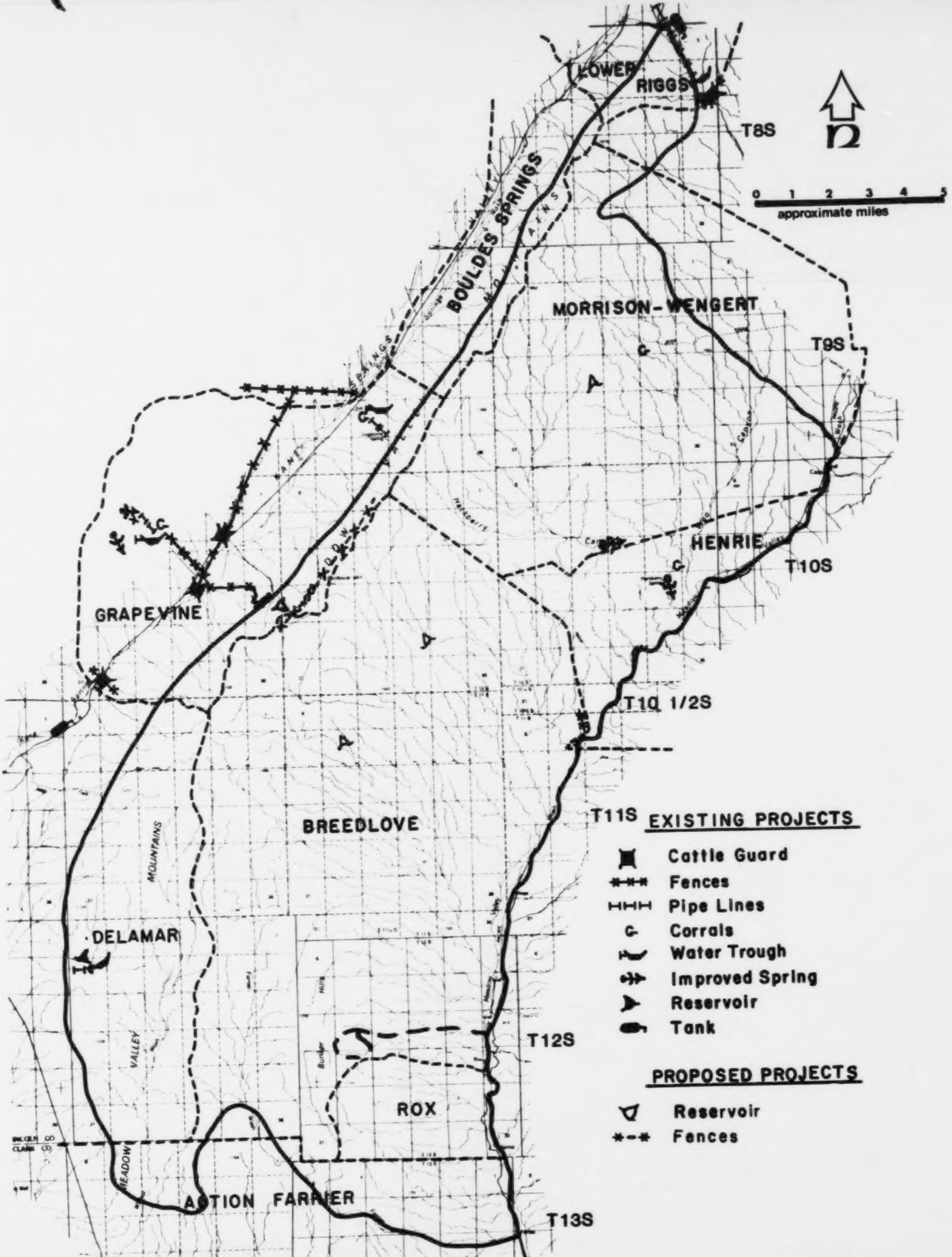
*REFER TO TEXT FOR EXPLANATION

SALABLE MINERAL POTENTIAL
MEADOW VALLEY RANGE NV-050-0156

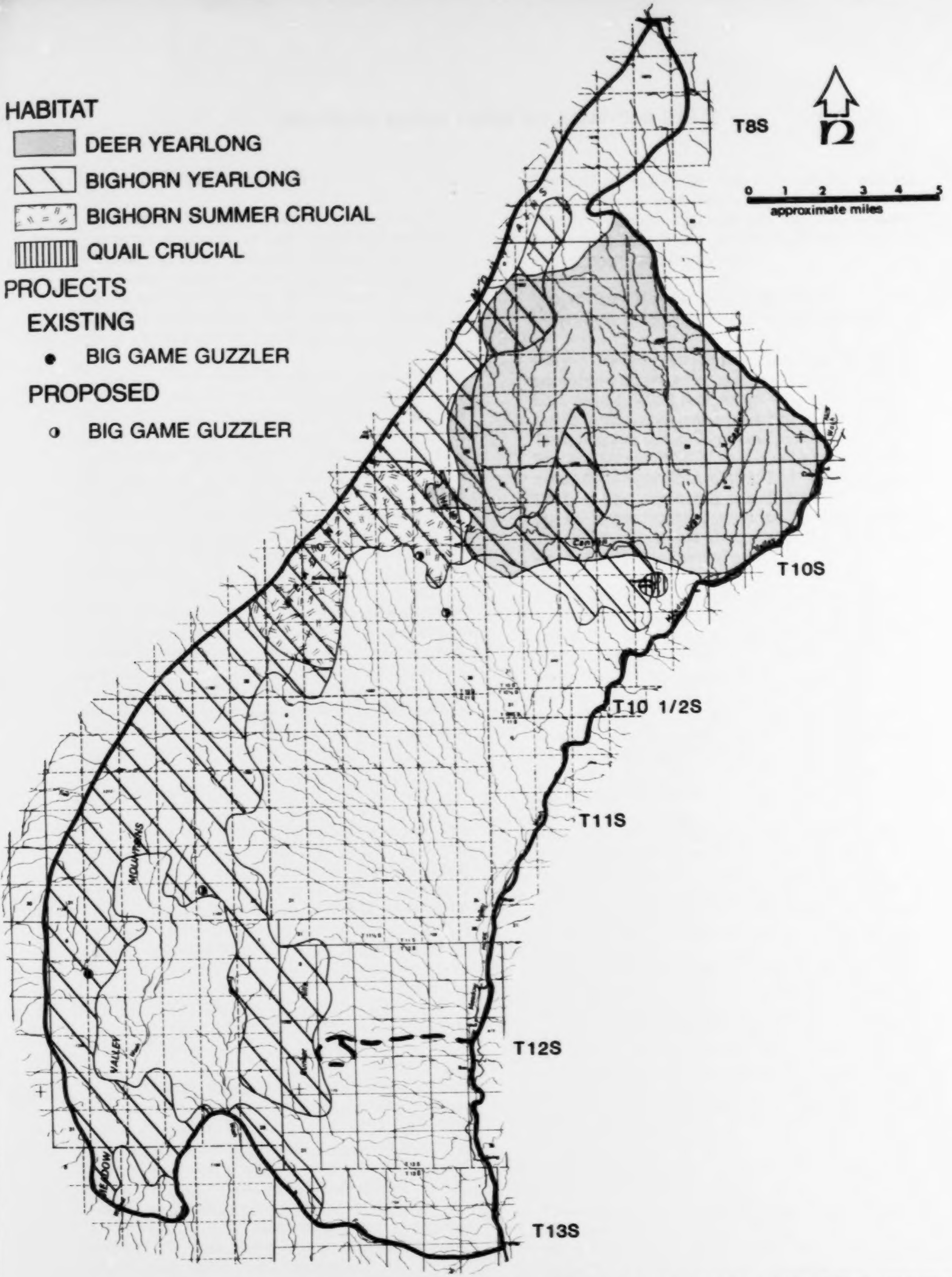

RELATIVE POTENTIAL
▭ 4
MINERAL TYPE *
A. PHOSPHATE
B. OIL AND GAS
GEOTHERMAL (in all areas)
▥ Pre-FLPMA OIL AND GAS LEASE (remaining areas all leased Post-FLPMA)
0 1 2 3 4 5
approximate miles
T8S
T10S
T10 1/2S
T11S
T12S
T13S
R64E
R65E
A
B
MEADOW VALLEY MOUNTAINS
Canyon
Bunker Hills

LEASABLE MINERAL POTENTIAL
OIL AND GAS LEASES
MEADOW VALLEY RANGE NV-050-0156

*REFER TO TEXT FOR EXPLANATION


LOWER
RIGGS
T8S
N
0 1 2 3 4 5
approximate miles
BOULDES SPRINGS
MORRISON-WENGERT
T9S
HENRIE
T10S
GRAPEVINE
T10 1/2S
BREEDLOVE
T11S
MOUNTAINS
DELAMAR
VALLEY
T12S
ROX
MEADOW
ACTION FARRIER
T13S
R64E
R65E
EXISTING PROJECTS
Cattle Guard
Fences
Pipe Lines
Corrals
Water Trough
Improved Spring
Reservoir
Tank
PROPOSED PROJECTS
Reservoir
Fences

RANGE PROJECTS
MEADOW VALLEY RANGE NV-050-0156


HABITAT
DEER YEARLONG
BIGHORN YEARLONG
BIGHORN SUMMER CRUCIAL
QUAIL CRUCIAL
PROJECTS
EXISTING
● BIG GAME GUZZLER
PROPOSED
◑ BIG GAME GUZZLER
T8S
0 1 2 3 4 5
approximate miles
T10S
T10 1/2S
T11S
T12S
T13S
MOUNTAINS
VALLEY
MEADOW
R64E
R65E

WILDLIFE HABITAT AND PROJECTS
MEADOW VALLEY RANGE NV-050-0156

MORMON MOUNTAINS WSA (NV-050-0161)

General Characteristics

The Mormon Mountains WSA is located seventy-five miles northeast of Las Vegas and contains the entire Mormon Mountain Range. The WSA is somewhat round in shape, measuring approximately twelve to sixteen miles east to west and fifteen to twenty miles north to south. Elevation ranges from 2,200 to 7,500 feet.

There are five major landform regions found within the WSA. The first is the Mormon Mountains core area consisting of extremely rugged limestone peaks, large overhung and vertical cliffs, and a maelstrom of deep canyons. The second, the Moapa Peak region, consists of a solitary limestone ridge on the south end of the WSA which is shaped like a knife blade laid on its back with the sharp edge skyward. The other three are all bajadas, which vary in size and topography.

Most of the WSA is covered by a desert shrub plant community consisting mainly of blackbrush, bursage, large yuccas, agave and Joshua trees. Creosote bush may be found in the northeastern portion of the WSA. Pinyon-juniper stands are common in the central core area and there is a small, relict stand of ponderosa pine near the summit of Mormon Peak.

Land Status

There are no private or other lands within this WSA. Small scattered parcels of private lands adjoin portions of the western boundary along Meadow Valley Wash. The west boundary also abuts the county road and/or the Union Pacific Railroad right-of-way at numerous places. A county road borders the WSA along its eastern side.

Wilderness Values

Naturalness

Approximately fifty to sixty percent of the WSA is unaffected by manmade features. Many man-made intrusions lie within the WSA, although most have been technically excluded by cherrystemming. These features include roads, ways, water developments, small abandoned mines, and mining disturbances. Ways include the following ones: Six to seven miles in the south, five miles in the east, seven miles in the northwest, and thirteen miles in the southwest.

Portions of the WSA are affected by outside sights and sounds associated with the Union Pacific Railroad right-of-way on the western boundary, low flying military aircraft and the above-mentioned features.

Opportunities for Solitude and Primitive and Unconfined Recreation

Pinyon-juniper stands provide good vegetative screening in areas above the 5,000 foot elevation. Below 5,000 feet, lower vegetation produces considerably less screening in many areas. Topographic screening in the mountainous portion and Moapa Peak area is outstanding throughout due to high cliffs, peaks, and deep canyons. Only limited screening is available on many of the lower hills and bajada areas. Secluded spots are easily locatable throughout the WSA, but especially in the central area.

Non-motorized recreation activities include day-hiking, backpacking, rock climbing and scrambling, nature study, photography, hunting, and horseback riding. The WSA offers outstanding opportunities for spelunking/caving within the Mormon Mountains core area. The WSA is an outstanding example of an isolated high desert mountain range which lends itself to excellent photographic opportunities.

Special Features

This WSA's supplemental values add much to the wilderness experience it offers. The WSA contains numerous limestone caves which are primarily found in the central two-thirds of its area. Botanical features in the WSA include the Meadow Valley Range sandwort (**Arenaria stenomeres**) which is a State protected species. Ponderosa pine is also found in a relict stand near the top. Zoological features include the desert tortoise and bighorn sheep. The northern spotted bat (classified "endangered" by the State) may exist in the WSA. The WSA is extremely rich in cultural resources. Over 200 prehistoric sites have been found including agave roasting pits, shelter caves, pictograph and petroglyph sites, to name but a few.

Recreation

There are no developed recreation facilities in or near the WSA. This WSA is the most popular of the five WSAs studied in this document, and is listed in the Sierra Club's published climbing guides. Visitation use is by individuals, family groups and organizational hikers.

Motorized vehicle use is impossible over much of the WSA due to steepness and roughness of terrain. Deeply penetrating cherrystem roads and ways offer access which is mostly confined to the canyon bottoms. The exceptions are bajadas on the southwest and a large gentle basin on the southeast which is crossed by ways.

Spelunking is an endeavor provided for in the WSA, which contains several spectacular limestone caves. These caves harbor many examples of stalactites, stalagmites, "ball" stalactites and unusual columnar structures.

Non-motorized recreation use is estimated to be 400 visitor-days annually and motorized recreation use at 510 visitor-days annually. Hunting use is estimated at 250 hunter-days annually.

Cultural Resources

Because of prior project-specific surveys and a University of Nevada Las Vegas survey which focused on one water source, twenty-nine sites were known in the Mormon Mountains. As a result, its sensitivity was recognized and an archaeological survey was contracted for and completed in this WSA. This recently completed sample-oriented cultural resources survey (Rusco and Munoz, 1983) yielded a wide range of statistical data and a total of 243 sites. Prehistoric site types include caves or rock-shelters with associated agave roasting pits, petroglyphs and pictographs, artifact scatters and rock alignments.

The historic sites found relate to mining, livestock raising, local and regional transportationand government land managment.

Energy and Mineral Resources

The following list and description of energy and mineral resources are categorized according to method of acquisition or disposal (i.e., locatable, leasable, or salable) and are ordered according to the classification described in Appendix Tables 3-1 and 3-2.

The only known mineral present in this WSA of potentially sufficient quality and quantity to be marketable is sand and gravel located on the western fringe of the WSA along Meadow Valley Wash, where it could be used locally for railroad or road repair.

Some minor past production may have occurred from the Whitmore Mine Prospect. Approximately 11,500 acres of post-FLPMA mining claims cover the southwestern and portions of the southeastern WSA. There are two pre-FLPMA mining claims located in the north-central area and covering 41.3 acres, (part of which are cherrystemed out of the WSA).

Locatable Minerals

The area in the core of the Mormon Mountains approximating the Resource Development alternative and nearby surrounding areas was evaluated by the U.S. Bureau of Mines and the U.S. Geological Survey (U.S.G.S., 1988). This study found that the Mormon Mountains WSA contains no identified resources. Occurrences of commercial grade limestone of undetermined extent are present. Geochemical studies produced some samples containing anomalous amounts of copper, lead, zinc, silver, gold, arsenic and antimony. Thorium, uranium and thallium were found sporadically in anomalous, but low amounts. The presence of favorable geologic environments and evidence of resource formation of metallic minerals was demonstrated, but the extent of the processes is unknown. Copper occurs but in unknown quantities at the Whitmore prospect in the south of the Mormon Mountains (Group-1 commodity in Class-2-3 areas). The Whitmore Mine vicinity also contains minor gold and silver (Group-2 commodity in Class-3 areas), barite (Group-4 commodity in Class-3 area), zinc (Group-1 commodity in Class-3 area) and an anomalous tungsten sample. Away from the area studied in the U.S.G.S. Bulletin, metallic resources may be inferred to occur in the western and northern flanks of the range and south of the Whitmore prospect (Group 1-3 commodities in Class 3 area). The known data for the following areas are unqualified for use in classification of potential: Thorium in the Precambrian igneous-metamorphic complex along lower west flank and an area west and near the Whitmore Prospect (Group-1 commodity in Class-4 area); uranium within the WSA (Group 1 and 3 commodity in Class-4 area); gypsum in Permian redbeds near the southwestern WSA boundary and near Carp in the northernmost portion (Group-4 commodity in Class-4 area); and other locatable minerals in the igneous-metamorphic complex or within existing or abandoned mining claims (Group-1 to 4 commodities in Class-4 area).

Leasable Minerals

There has been no hydrocarbon production from this WSA and no exploratory drilling. There was some seismic exploration in the southwest. The entire WSA is leased post-FLPMA.

Oil and gas resources possibly occur in this WSA. The area was classified by the U.S. Geological Survey as having potential for speculative oil and gas resources, but there is a lack of qualified data for use in classification of potential (Group-1 commodity in Class-4 area). Geothermal resources probably do not occur in this WSA, although there are no data to verify this (Group-1 commodity, Class-4 area). The U.S. Geological Survey has not classified the area as prospectively valuable for geothermal or other leasable mineral resources.

Salable Minerals

Sand and gravel resources exist in abundance within alluvial fan areas, but with minor market demand (Group-4 commodity, Class-2 area). Other common variety minerals may exist in unknown quantities in bedrock areas (Group-4 commodity, Class-3 areas).

Livestock Management

Portions of seven allotments overlap the WSA. Table 3-1 contains the acreage and pro-rated AUMs derived from the WSA.

Portions of two allotments (White Rock and Gourd Spring) have been identified through CRMP as needing an Allotment Management Plan (AMP). The Mormon Peak Allotment was identified in the Caliente MFP for development of an AMP in conjunction with a Habitat Management Plan to alleviate conflicts between bighorn sheep and cattle. Existing developments consist of four spring developments, four water troughs, one corral, and approximately five miles of pipelines. Two one-half-mile gap fences separate Gourd Spring Allotment from Mormon Peak and White Rock Allotments, and White Rock and Henrie Allotments. There is also a small exclosure in White Rock Allotment.

Wildlife

Wildlife includes mule deer, bighorn sheep, quail, golden eagles, prairie falcons and other raptors (protected by the State). The desert tortoise (State-listed as "rare" in Nevada) is present. The northern spotted bat (classified as "endangered" by the State) has been known to occur in the Mormon Mountains.

Wild Horses

The area contains approximately twenty-seven wild horses and was identified, through the Caliente MFP, as needing an intensive herd management plan.

Lands

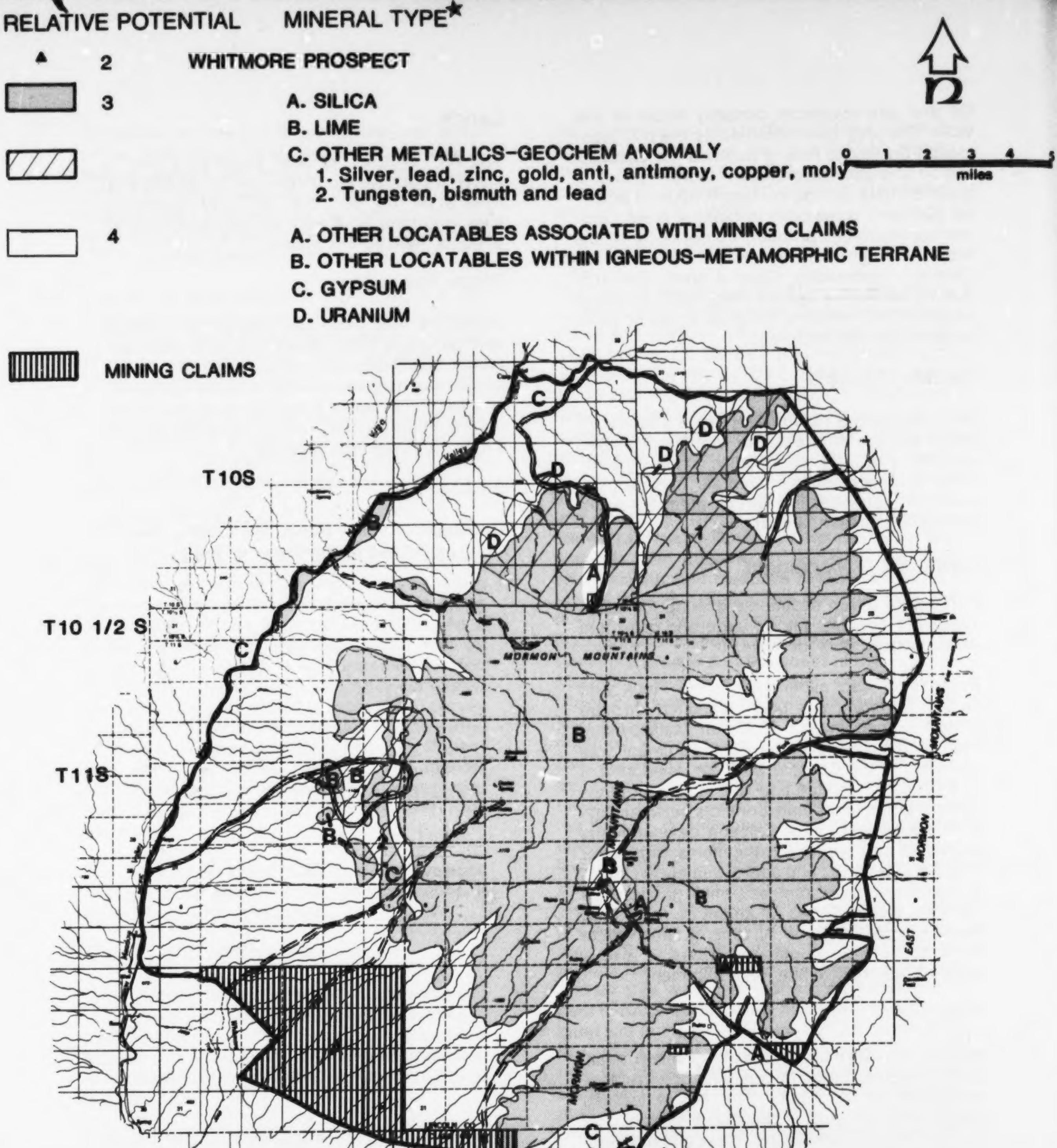
The Air Force in the past identified a plan to install a portable electronic station on Mormon Peak at 36° 58" 30", 114° 30' 11'W. Alternative sites out of the WSA were subsequently located to accommodate this system.

Water Resources

There are two perennial and six intermittent springs in this WSA. Water quality is unknown. Wilderness designation would not preclude administrative action to maintain or restore potability of waters, nor would it prevent projects for this reason if they should prove to be necessary and if they are compatibly designed.

Air Quality

The Meadow Valley Range WSA has a Class II rating as defined by the **Clean-air Act of 1977**.

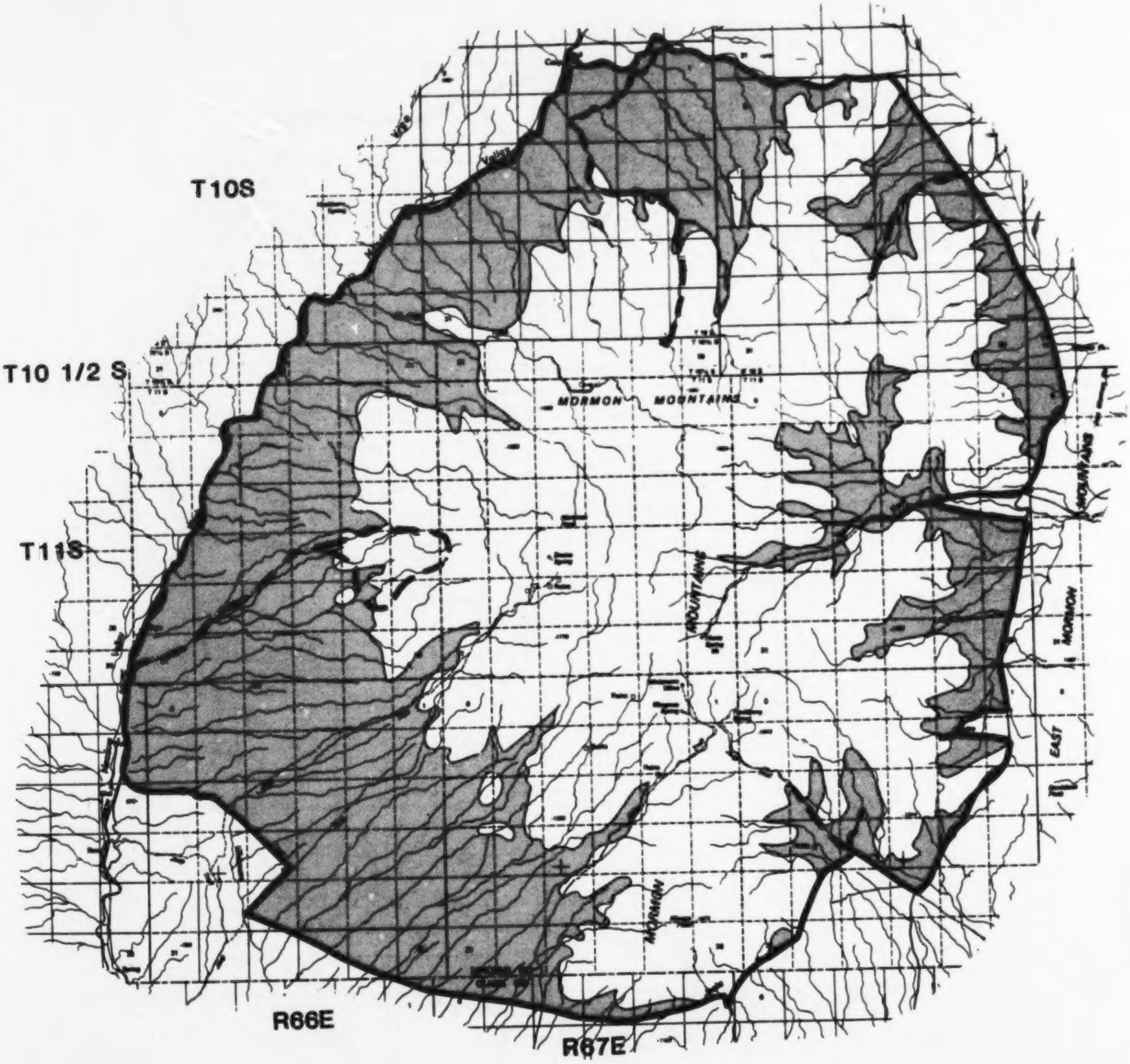

RELATIVE POTENTIAL
MINERAL TYPE*
▲ 2
WHITMORE PROSPECT
3
A. SILICA
B. LIME
C. OTHER METALLICS-GEOCHEM ANOMALY
1. Silver, lead, zinc, gold, anti, antimony, copper, moly
2. Tungsten, bismuth and lead
4
A. OTHER LOCATABLES ASSOCIATED WITH MINING CLAIMS
B. OTHER LOCATABLES WITHIN IGNEOUS-METAMORPHIC TERRANE
C. GYPSUM
D. URANIUM
MINING CLAIMS
0
1
2
3
4
5
miles
T10S
T10 1/2 S
T11S
R66E
R67E
MORMON MOUNTAINS
EAST MORMON MOUNTAINS
Valley
A
B
C
D
1
2

LOCATABLE MINERAL POTENTIAL AND MINING CLAIMS
MORMON MTNS. NV-050-0161

*REFER TO TEXT FOR EXPLANATION

RELATIVE POTENTIAL	MINERAL TYPE*
▨ 2	SAND AND GRAVEL
☐ 3	OTHER SALABLES

0 1 2 3 4 5
approximate miles



T10S
T10 1/2 S
T11S
R66E
R67E
MORMON MOUNTAINS
MOUNTAINS
MORMON
EAST MORMON
MOUNTAINS

*REFER TO TEXT FOR EXPLANATION

SALABLE MINERAL POTENTIAL
MORMON MTNS. NV-050-0161

RELATIVE POTENTIAL

4

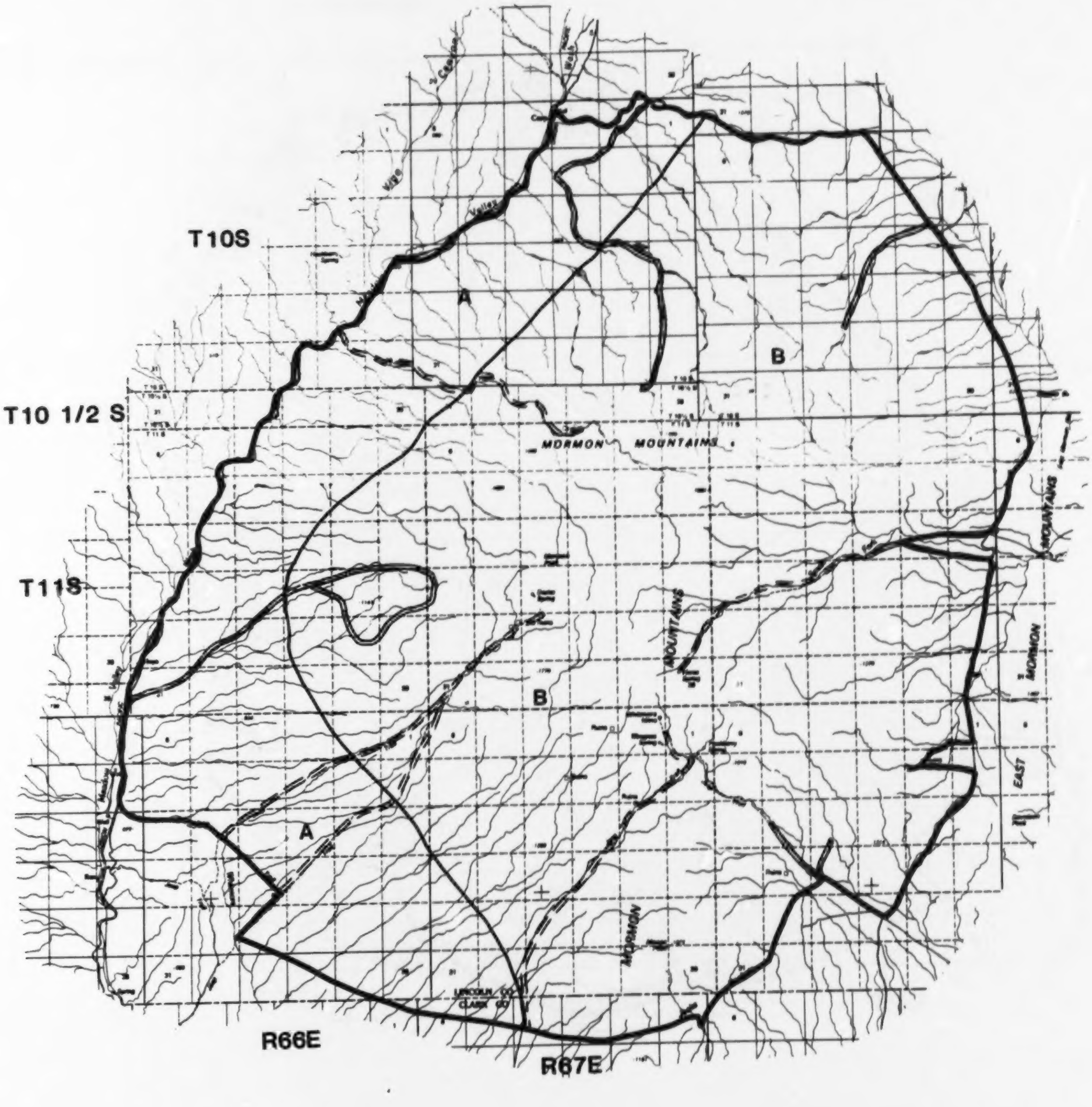
MINERAL TYPE *

A. OIL AND GAS WESTERN
B. OIL AND GAS EASTERN

GEOTHERMAL (in all areas)

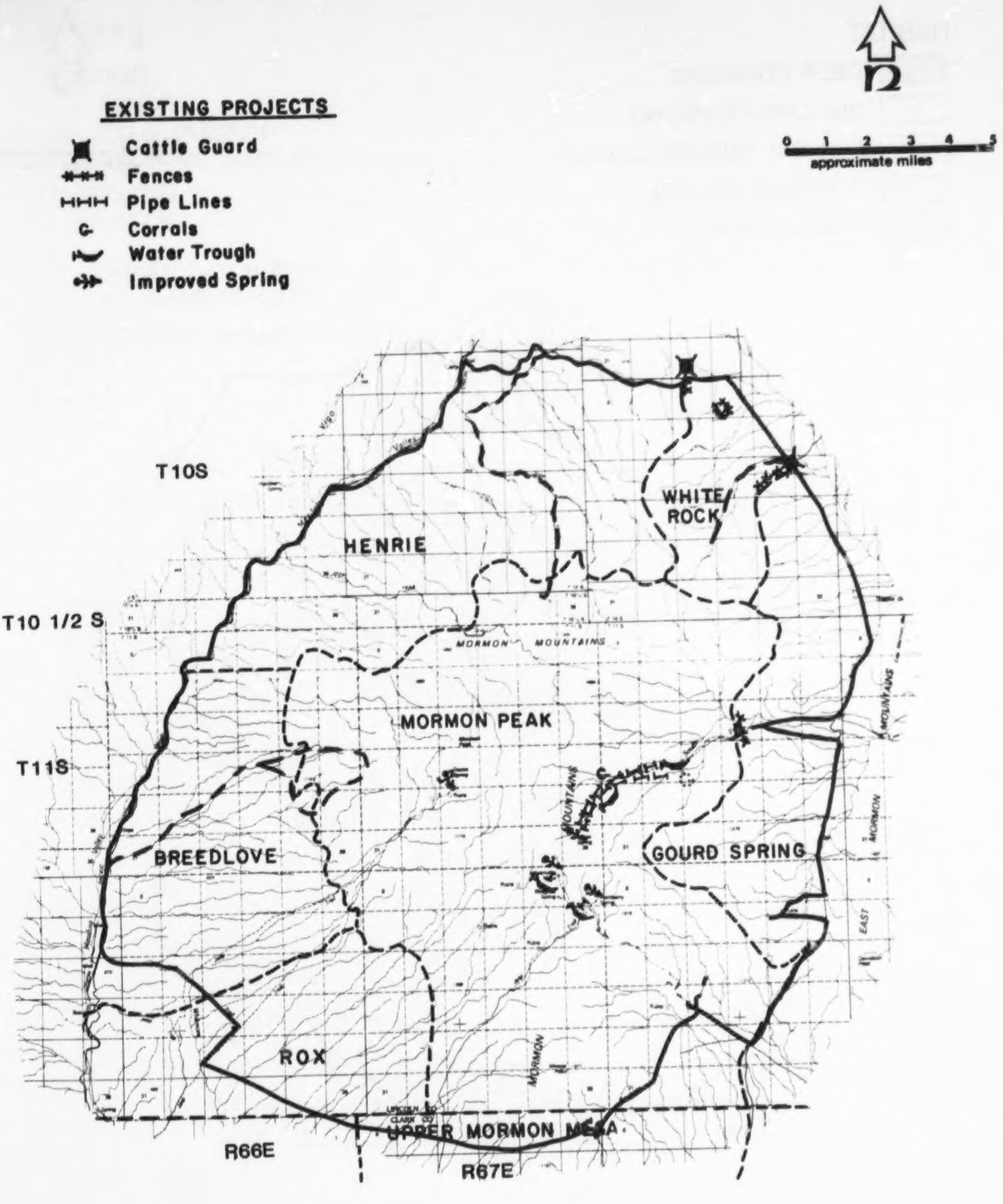
n

0 1 2 3 4 5
approximate miles

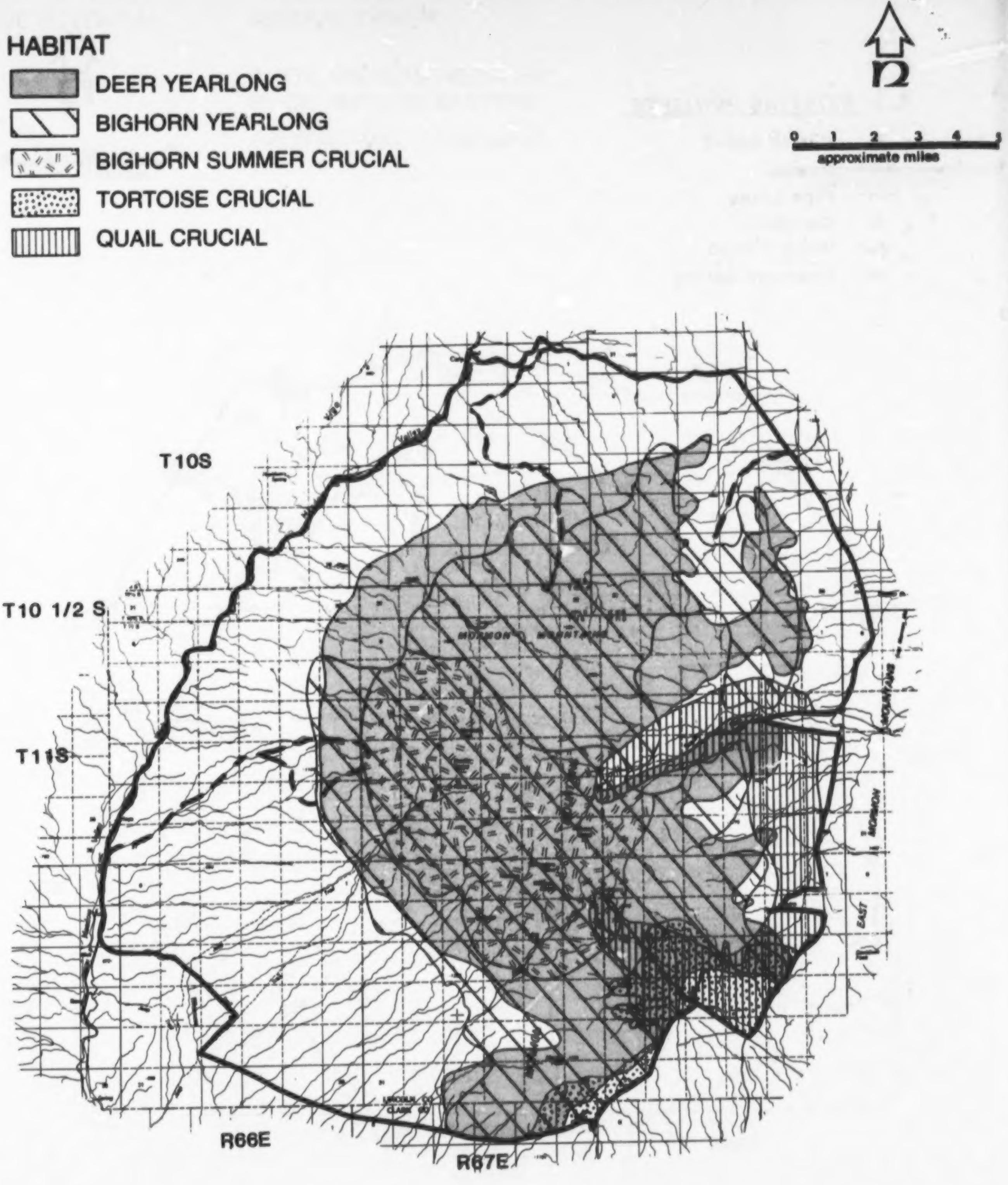

T10S
T10 1/2 S
T11S
R66E
R67E
A
B
B
A
MORMON MOUNTAINS
MOUNTAINS
MORMON
EAST MORMON MOUNTAINS
LINCOLN CO
CLARK CO
Meadow Valley Wash

LEASABLE MINERAL POTENTIAL
OIL AND GAS LEASES
MORMON MTNS. NV-050-0161

*REFER TO TEXT FOR EXPLANATION

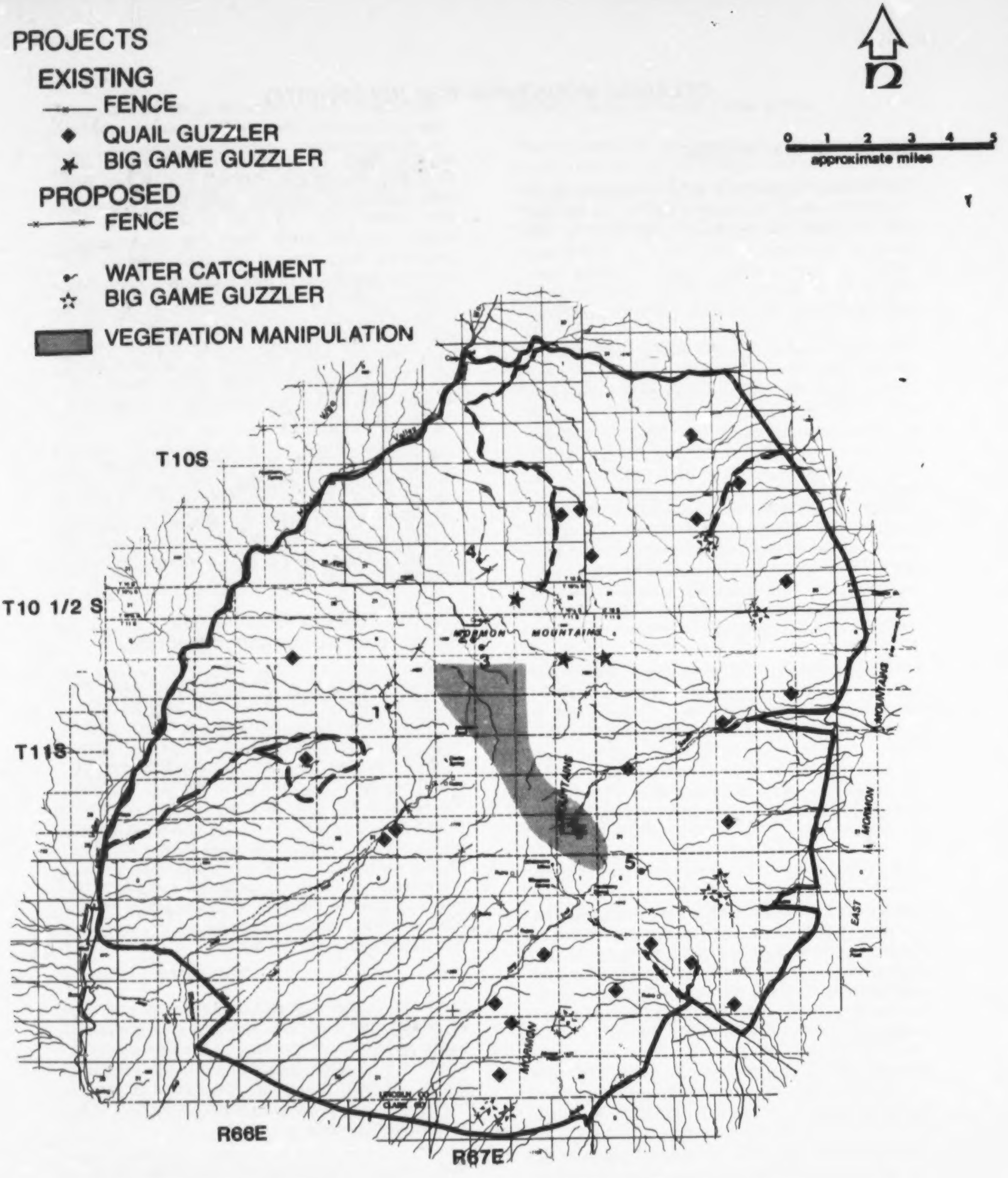

EXISTING PROJECTS
Cattle Guard
Fences
Pipe Lines
Corrals
Water Trough
Improved Spring
N
0 1 2 3 4 5
approximate miles
T10S
T10 1/2 S
T11S
HENRIE
WHITE ROCK
MORMON MOUNTAINS
MORMON PEAK
BREEDLOVE
GOURD SPRING
ROX
UPPER MORMON MESA
EAST MORMON MOUNTAINS
LINCOLN CO
CLARK CO
R66E
R67E

RANGE PROJECTS
MORMON MTNS. NV-050-0161


HABITAT
DEER YEARLONG
BIGHORN YEARLONG
BIGHORN SUMMER CRUCIAL
TORTOISE CRUCIAL
QUAIL CRUCIAL
N
0 1 2 3 4 5
approximate miles
T10S
T10 1/2 S
T11S
R66E
R67E
MORMON MOUNTAINS
EAST MORMON MOUNTAINS
LINCOLN CO.
CLARK CO.

WILDLIFE HABITAT

MORMON MTNS. NV-050-0161


PROJECTS
EXISTING
FENCE
◆ QUAIL GUZZLER
✶ BIG GAME GUZZLER
PROPOSED
FENCE
WATER CATCHMENT
☆ BIG GAME GUZZLER
▨ VEGETATION MANIPULATION
n
0 1 2 3 4 5
approximate miles
T10S
T10 1/2 S
T11S
R66E
R67E
MORMON MOUNTAINS
MOUNTAINS
MORMON
EAST
MORMON
MOUNTAINS
1
2
3
4
5

WILDLIFE HABITAT PROJECTS
MORMON MTNS. NV-050-0161

DELAMAR MOUNTAINS WSA (NV-050-0177)

General Characteristics

The Delamar Mountains WSA is located about seventy-five miles northeast of Las Vegas, Nevada and contains the southern extension of the Delamar Mountains. The WSA is elongated, measuring approximately three to sixteen miles east to west and twenty-three miles north to south. Elevation ranges from 2,600 to 6,600 feet.

The study area's diverse landscape offers a variety of landforms. The core contains a broad rolling mesa-like plateau dissected by several ridges and canyons. West of this plateau is an abrupt escarpment which falls 2000 feet or more in a series of cliffs, steep slopes, and short, highly inclined canyons to gently sloping bajadas. The southern end contains several spectacular canyons originating from the central core. The eastern portion of the WSA contains rugged butte-shaped mountains rising above the mesa area in a series of ridges and small canyons. The northwestern side is bounded by another series of bluffs, steep slopes, high cliffs and isolated canyons.

Vegetation is diverse. Desert shrub is the most extensive vegetation type and is dominated by blackbrush. The northern end of the WSA is covered with a big sagebrush community. Pinyon-juniper stands cover the north-central part. Annual grassland and the salt desert shrub community vegetate the remainder of the unit. Joshua trees, yuccas and agaves punctuate the landscape.

Land Status

There are no private lands within or adjacent to this WSA. It is bordered by a powerline right-of-way on the northwest, the Highway 93 right-of-way on the west and the Kane Springs County road on the southeast. Two material sites indent the WSA boundary from the Highway 93 right-of-way.

Wilderness Values

Naturalness

Approximately sixty-five to seventy percent of the WSA is unaffected by manmade features. The WSA contains ten quail guzzlers, a five mile bladed cherrystem road to a reservoir, a three-mile cherrystem road to Willow Springs, and several ways. These ways include a four mile plus way across the northern end, a two mile way extending westerly from the Pony Well cherrystem road and a six to seven mile way which extends north from the southeastern boundary. Also present are approximately five and one-half miles of fence in Lower Lake East allotment, approximately one and one-half miles of fence between Buckhorn and Delamar allotments, three reservoirs, one tank, one water haul, and two miles of fence in Delamar allotment, two developed springs, water trough, corral and two and one-half miles of pipeline in Grapevine allotment.

The outer perimeter of the WSA is affected by outside sights and sounds. Affecting the naturalness of the WSA are the Pony Well cherrystem road in the core area, the western boundary road (Highway 93) and its associated powerline corridor which may become a more significant effect with future development.

Opportunities for Solitude and Primitive and Unconfined Recreation

Adequate vegetative screening is not available anywhere within the WSA. Outstanding topographic screening is offered for a portion of the WSA by several deep twisting canyons that flow out of the core of the region. Additional outstanding topographic screening occurs in portions of the eastern mountainous region. The western ridges and the canyons on the lower northwest and north provide outstanding screening. The central mesa tops and the bajadas have limited topographic screening. Secluded spots may be found in Bomber Wash and other washes and in the more mountainous regions on the western and eastern sides of the WSA.

Because of the vast size of the area and the expected light visitation, the lack of vegetation and topographic screening on the mesa tops is offset as a negative factor in obtaining solitude. Some intrusion upon solitude comes from the highway along the western side, affecting only the adjacent bajada.

Non-motorized recreational activities include day hiking, rock climbing and scrambling, backpacking, nature study, hunting, photographic opportunities and horseback riding. Opportunities to observe and photograph bighorn sheep exist. From the uplands, vast panoramas of the Sheep Range to the west and verdant Pahranagat Valley are seen, along with numerous ranges extending westerly. To the east, the Meadow Valley

Range, the Mormon Mountains and others form another panorama. Factors which cause a range in non-motorized recreation opportunities from low to outstanding are a lack of arboreal vegetation and the variability in topography from relatively flat bajadas to very incised terrain.

Special Features

The following supplemental values add to the wilderness experience within this WSA; zoological, geological, botanical and cultural features. Desert tortoise inhabit the bajadas in the southern and western portions of the area. Praire falcons and golden eagles may also pass through the WSA along the southern boundary. One State-protected plant species, **Astragalus nyensis Barneby** (Nye milkvetch), is found within the WSA. Butte-like geologic formations and mesas, occurring only within this WSA, add visual diversity to the landform features. Extensive faulting during the development of the ancient Kane Springs Caldera structure is of interest and is being studied. More than a dozen prehistoric sites have been recorded within the WSA.

Recreation

There are no developed recreation facilities within or adjacent to the WSA. Use is very light, usually by individuals or family groups. Most usage is probably by hunters and trappers. Motorized vehicle use is present for short distances in washes on the western side, up Bomber Wash and other washes on the southern bajada and on the cherrystemmed Willow Spring and Pony Well roads. Some ways in the vicinity of Willow Spring and one across the northern tip are also used. Overall usage is light and estimated to be twenty-five visitor-days annually for primitive recreation and one hundred visitor-days for motorized recreation use.

Cultural Resources

Over a dozen prehistoric sites have been recorded within this WSA. Site types representative of the WSA include many open lithic and ceramic scatters, rock-shelters, rock art sites and milling sites. In addition, the Kane Springs Wash area, located immediately adjacent to the study unit to the south and east, represents a highly sensitive complex of sites in the form of an obsidian quarry source with related open obsidian lithic workshop sites scattered along Kane Springs Wash. Also, Delamar Lake, which is located immediately adjacent to the northeastern corner of the study unit, represents another highly sensitive area containing camp sites along the rim of the playa, rock art sites, and lithic scatters.

Energy and Mineral Resources

The following list and description of energy and mineral resources are categorized according to method of acquisition or disposal (i.e., locatable, leasable, or salable) and are ordered according to the classification described in Appendix Tables 3-1 and 3-2.

The only known mineral present in this WSA of potentially sufficient quality and quantity to be marketable is sand and gravel located on the bajadas. Sand and gravel are found around the edges of the WSA and some pits are used along the western and southwestern sides for road repair. There are no mining claims in the WSA.

Locatable Minerals

Silica and lime resources may occur in the respective quartzite or carbonate rock units within the western, southern, and southeastern flanks of the Delamar Mountains (Group-4 commodity in Class-3 areas). Perlite possibly occurs within the volcanic rock units, but no data exist to verify this (Group-4 commodity in Class-4 area). Uranium and other minerals possibly occur in this WSA, but the known data are unqualified for use in classification of potential (Group-1 or 3 commodity in Class-4 area).

Leasable Minerals

There has been no hydrocarbon production from this WSA and no exploratory drilling. No known seismic work has been accomplished. The entire WSA is under post-FLPMA leases.

Oil and gas resources possibly occur in this WSA. The area was classified by the U.S. Geological Survey as having potential for speculative oil and gas resources, but there are a lack of qualified available data for use in classification of potential (Group-1 commodity in Class-4 area). Phosphate rock resources possibly exist in unknown quantities within the Chainman Shale in the south center of the WSA, but there is a lack of qualified data for use in classification of potential (Group-3 commodity in Class-4 area). Geothermal resources probably do not occur in this WSA, although there are no data to verify this (Group-1 commodity in Class-4 area). The U.S. Geological Survey has not classified the area as prospectively valuable for geothermal or other leasable mineral resources.

Salable Minerals

Sand and gravel resources exist in substantial quantities within material site rights-of-way, within areas identified for issuance of free use permits and in similar areas along the southwestern and southeastern transportation corridors bounding the WSA (Group-4 commodities in Class-1 areas). Other sand and gravel resources exist in significant quantities within the remaining alluvial fan areas, but without a significant market demand (Group-4 commodities in Class-2 areas). Other common variety minerals may exist in unknown quantities in bedrock areas (Group-4 commodities in Class-3 areas).

Livestock Management

Portions of four allotments overlap the WSA. Table 3-1 contains the acreage and pro-rated AUMs derived from the WSA. Grapevine is currently managed under a three pasture rotational grazing system and Buckhorn and Lower Lake allotments were identified through CRMP as needing an intensive management system. Delamar Allotment has an existing Allotment Management Plan (AMP). Development and implementation of this AMP and present stocking levels are Bureau obligations gained through a negotiated court settlement and dismissal of a grazing appeal filed and ordered August 16, 1979 (Nevada 5-75-3). This court settlement detailed numbers of AUMs, development and implementation of an AMP, an interim grazing system, certain necessary projects to be included in the AMP and a time frame for completion of each of these steps. In accordance with these requirements, an AMP was completed and accepted by both parties on February 5, 1981. One improvement identified in the AMP was a permanent water source in Bomber Wash (identified as a well which, when drilled, was not producible). Without a water source in this area, this pasture will be unusable thus precluding full implementation of the AMP.

Existing projects are approximately five and one-half miles of fence in Lower Lake East Allotment, approximately one and one-half miles of fence between Buckhorn and Delamar Allotments, three reservoirs, one tank, one water haul, and two miles of fence in Delamar Allotment, two developed springs, water trough, corral and two and one-half miles of pipeline in Grapevine Allotment.

Wildlife

A small population of mule deer are present and occasional bighorn sheep. Golden eagles, prairie falcons, and other raptors (protected by the State) may pass through or exist in the area. Quail are present in huntable numbers. Desert tortoise, state-listed as "rare" in Nevada, are present on the southern and western fringes. Table 3-2 shows significant wildlife habitat by WSA.

There is a Management Framework Plan decision calling for a bighorn sheep reintroduction in the Delamar Mountains.

Lands

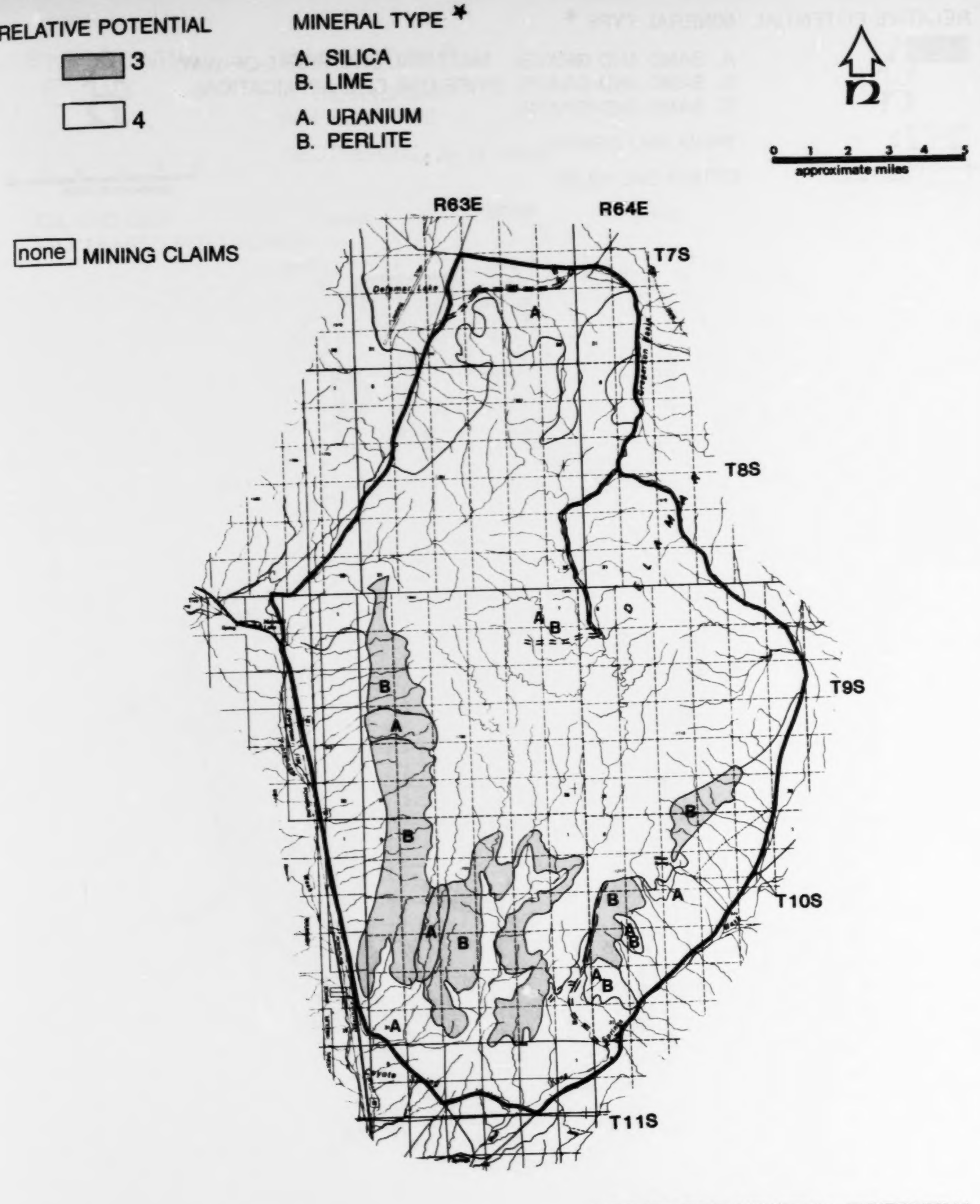
A planning utility corridor borders the west side of the WSA. This corridor contains one 69kV line and an approved 500kV line for the Intermountain Power Project. In addition, the White Pine Power Project proposes one or two 500kV lines which would run in this corridor, if space is available, or, alternatively, through Kane Springs Valley on the WSA's eastern side.

Water Resources

There is one perennial spring in this WSA and its water quality is unknown. Wilderness designation would not preclude administrative action to maintain or restore potability of waters, nor would it prevent projects for this reason if they are necessary and are compatibly designed.

Air Quality

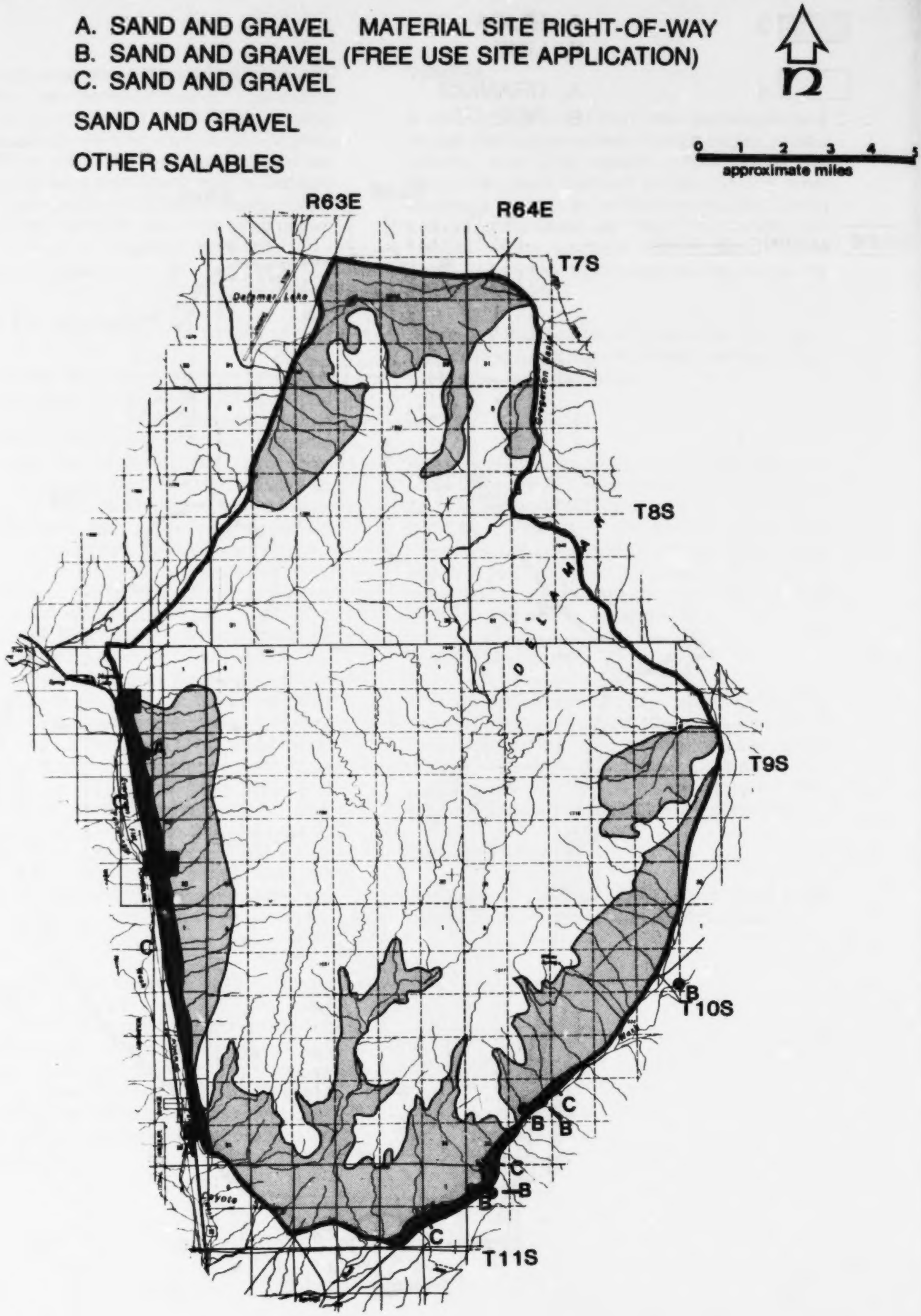
The Delamar Mountains WSA has a Class II rating as defined by the **Clean Air Act of 1977**.


RELATIVE POTENTIAL
▨ 3
☐ 4
MINERAL TYPE *
A. SILICA
B. LIME
A. URANIUM
B. PERLITE
none MINING CLAIMS
0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
T8S
T9S
T10S
T11S
Delamar Lake
A
B

LOCATABLE MINERAL POTENTIAL
and MINING CLAIMS
DELAMAR MTNS. NV-050-0177

*REFER TO TEXT FOR EXPLANATION

RELATIVE POTENTIAL	MINERAL TYPE *
■ 1	A. SAND AND GRAVEL MATERIAL SITE RIGHT-OF-WAY B. SAND AND GRAVEL (FREE USE SITE APPLICATION) C. SAND AND GRAVEL
▨ 2	SAND AND GRAVEL
☐ 3	OTHER SALABLES


n
0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
Delamar Lake
T8S
T9S
B
T10S
C
B
B
C
B
B
C
T11S
C
Coyote

SALABLE MINERAL POTENTIAL

DELAMAR MTNS. NV-050-0177

*REFER TO TEXT FOR EXPLANATION

ELATIVE POTENTIAL

☐ 4

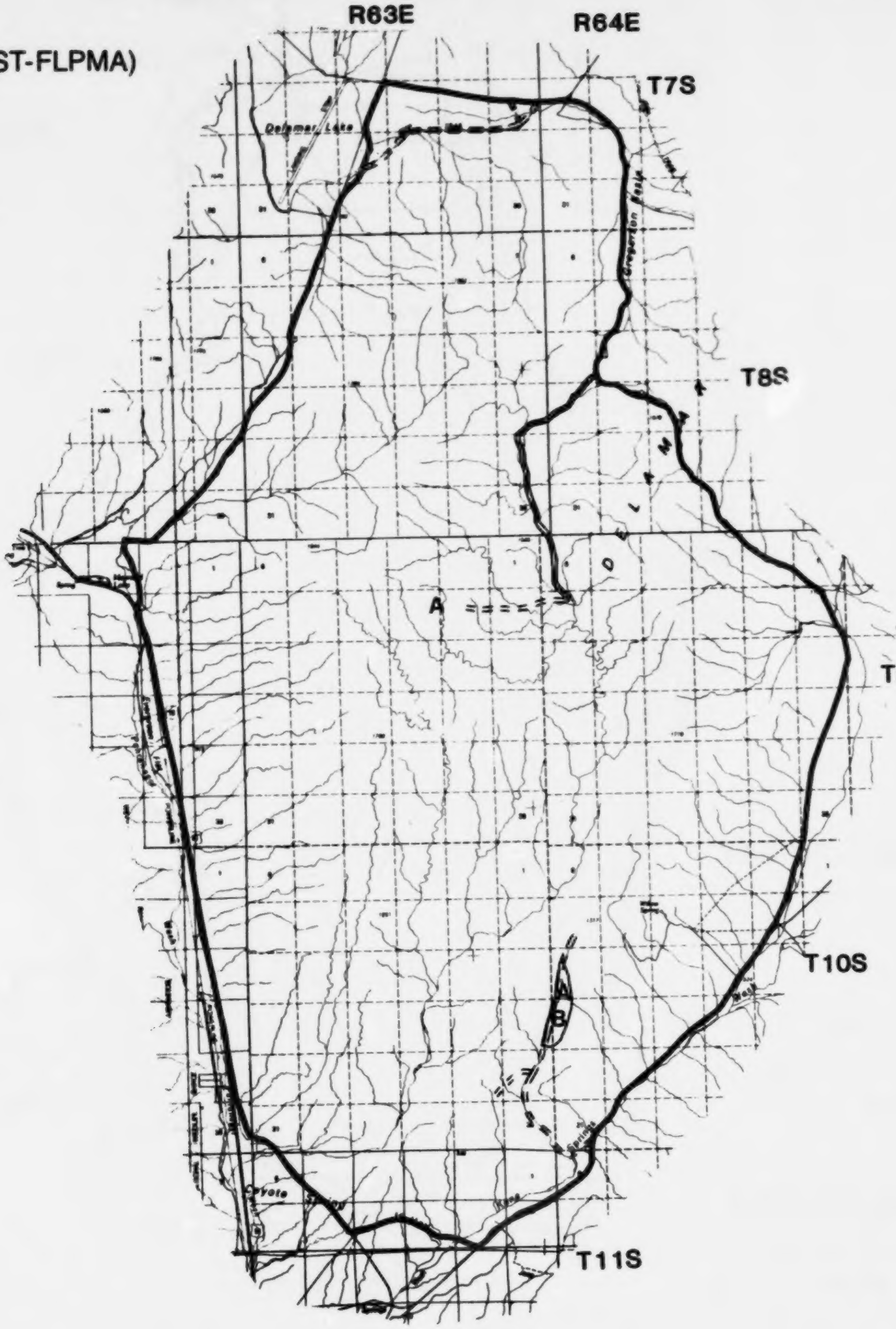
MINERAL TYPE *

A. OIL AND GAS
B. PHOSPHATE

GEOTHERMAL (in all areas)

0 1 2 3 4 5
approximate miles

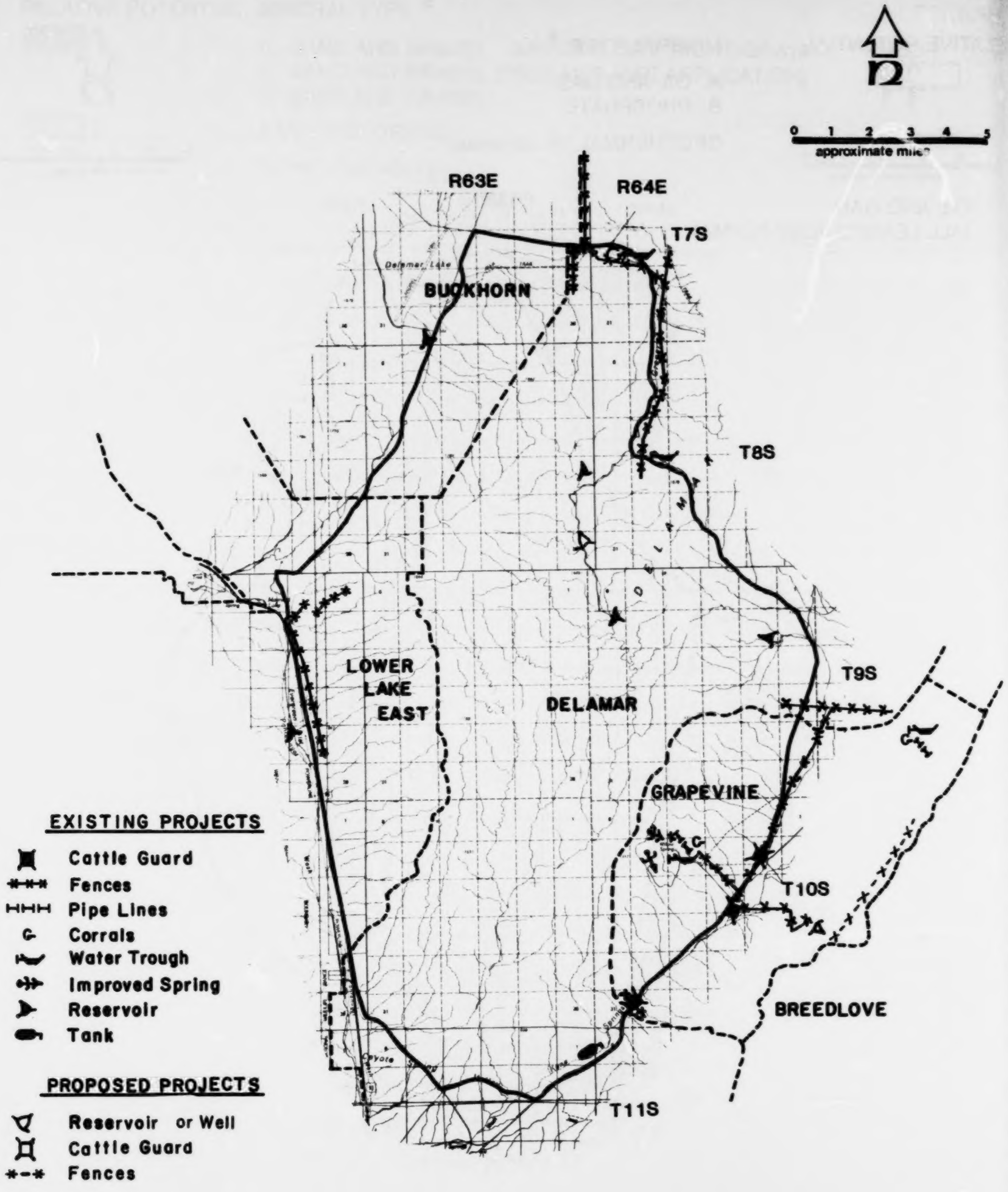
OIL AND GAS
(ALL LEASED POST-FLPMA)


R63E
R64E
T7S
Delamar Lake
T8S
A
T9S
T10S
B
Coyote Spring
T11S

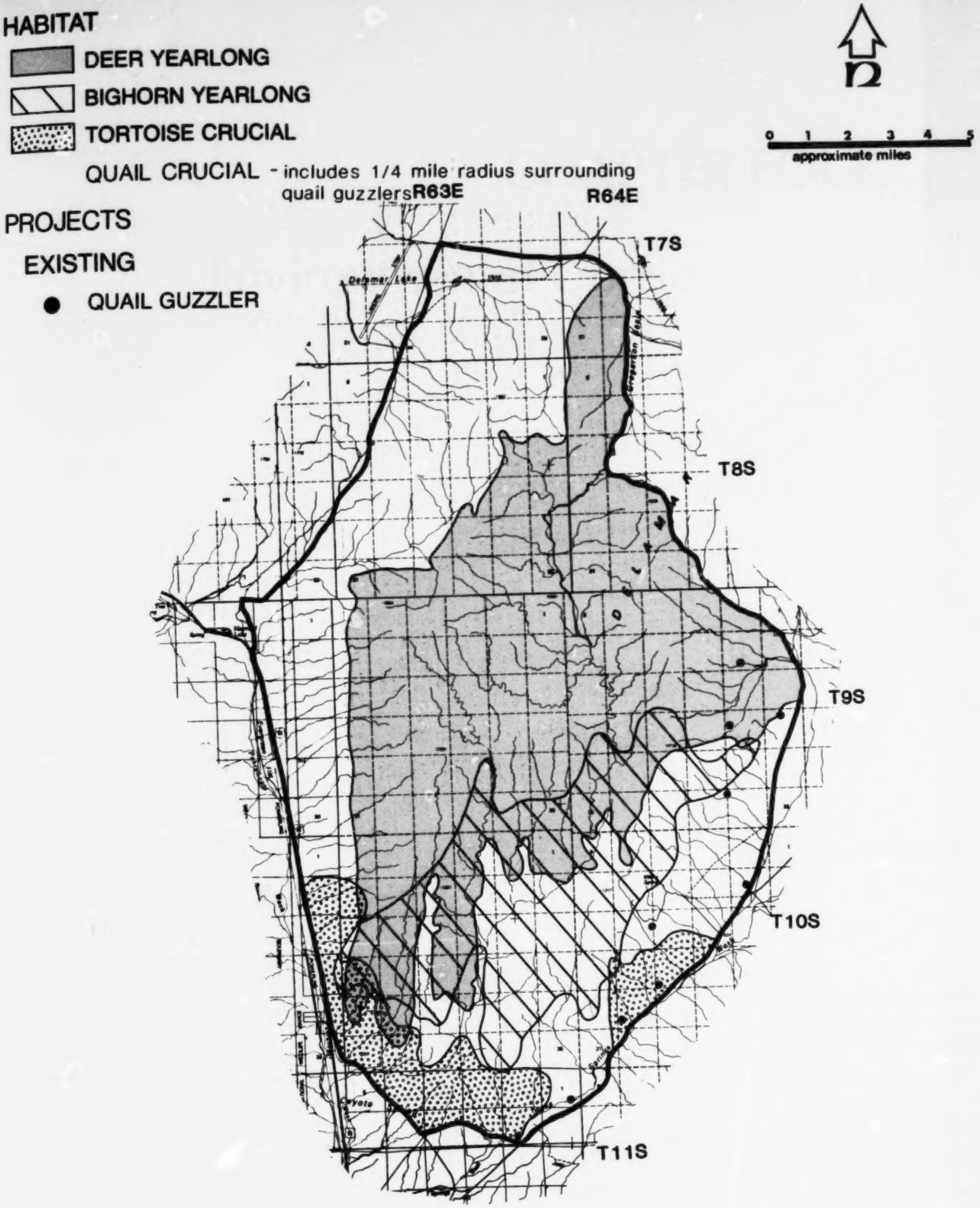
LEASABLE MINERAL POTENTIAL
OIL AND GAS LEASES

DELAMAR MTNS. NV-050-0177

*REFER TO TEXT FOR EXPLANATION


N
0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
T8S
T9S
T10S
T11S
Delamar Lake
BUCKHORN
LOWER LAKE EAST
DELAMAR
GRAPEVINE
BREEDLOVE
Coyote
EXISTING PROJECTS
Cattle Guard
Fences
Pipe Lines
Corrals
Water Trough
Improved Spring
Reservoir
Tank
PROPOSED PROJECTS
Reservoir or Well
Cattle Guard
Fences

RANGE PROJECTS
DELAMAR MTNS. NV-050-0177


HABITAT
DEER YEARLONG
BIGHORN YEARLONG
TORTOISE CRUCIAL
QUAIL CRUCIAL - includes 1/4 mile radius surrounding quail guzzlers
PROJECTS
EXISTING
● QUAIL GUZZLER
N
0 1 2 3 4 5
approximate miles
R63E
R64E
T7S
T8S
T9S
T10S
T11S
Delamar Lake

WILDLIFE HABITAT AND PROJECTS
DELAMAR MTNS. NV-050-0177

CHAPTER FOUR

Environmental Consequences

CHAPTER 4
ENVIRONMENTAL CONSEQUENCES

SOUTH PAHROC RANGE WSA (NV-050-0132)

Proposed Action
(Partial Wilderness Alternative)

Suitable: 28,395 acres Nonsuitable: 205 acres

The Proposed Action recommends all of the WSA as suitable for wilderness designation except for 205 acres encumbered by mining claims for perlite on the extreme northeastern side of the unit.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

Nowhere in the WSA is the hand of man evident except for aboriginal material. A slight positive effect on naturalness would occur from preclusion of ORVs on the fan slopes and the consequent prevention of new way development. Similarly, no surface disturbance would occur on the east-central side of the WSA in conjunction with mining exploration for perlite.

Wilderness designation would withdraw the area from mineral entry and preclude casual exploration activities which inevitably occur over time and which generally impair naturalness in their vicinity.

There are no cherrystem roads and closing and rehabilitating a 1.1 mile way which extends from the northern boundary would improve naturalness. In the immediate vicinity of boundary roads, motorized recreational use would occur on an occasional basis and would slightly reduce naturalness by introducing noise and mechanical conveyances. This would affect naturalness and solitude.

Naturalness (Nonsuitable Portion):

On the 205 acre area recommended as nonsuitable, perlite mining would result in construction of one-third mile of road and disturbance of twenty to thirty acres of surface, destroying naturalness thereon. Because of the visibility of the disturbed areas from adjacent sections, naturalness would be affected in varying degrees ranging from total loss in nearby areas, to slight impairment in the more distant ones. This would affect another one hundred acres or so.

Wilderness designation would withdraw the area from mineral entry and preclude casual exploration activities which inevitably occur over time and which generally impair naturalness in their vicinity.

Solitude (Suitable Portion):

Outstanding solitude would persist for the long term and would be unimpaired except when the mine portal is being developed. Due to the type of terrain, even this would be a minor, short-term and localized effect.

On 2,395 acres of alluvial fans scattered around the fringes of the WSA, solitude is marginal due to the openness and lack of higher vegetation. Consequently, activities in the surrounding valleys and on bounding roads would adversely affect solitude.

Solitude (Nonsuitable Portion):

Solitude would be impaired intermittently on two hundred acres when mining operations were underway. Equipment noise and dust, trucks hauling perlite and the presence of workers would affect solitude on the site and within earshot or view of the operation.

Primitive and Unconfined Recreation (Suitable Portion):

By precluding anticipated exploration for perlite on the WSA's east-central side, this alternative would preserve the abundant and outstanding primitive and unconfined recreation resources present there. Included are excellent backpacking and dayhiking and the eastern escarpment offers challenging mountain climbing. Rock scrambling or climbing are available throughout this area as well as photographic opportunities.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Primitive recreation opportunities would be substantially impaired on two hundred acres due to the disturbance caused by mining.

Special Features (Suitable Portion):

Supplemental values of botanical, zoological and geological interest would be better preserved on 26,000 acres. These include regionally rare white fir and aspen, possible northern spotted bats and rounded, stacked boulders.

Special Features (Nonsuitable Portion):

Special features in this area include possible northern spotted bats and rounded stacked boulders.

Conclusion

Designation of 28,395 acres recommended as suitable would preserve excellent opportunities for solitude, primitive and unconfined recreation, highly scenic geologic features and stands of regionally rare white fir and aspen in an unusual setting. In the area not designated, long-term physical changes would occur on twenty to thirty acres of the WSA's northeastern side, where mining would develop a one-third mile road and a portal and staging area for an underground mine. Naturalness would be affected on these acres and on the surrounding one hundred acres of viewshed. Solitude would be affected on two hundred acres in the vicinity while mine development was occurring and occasionally during its operations. Primitive and unconfined recreation opportunities would be impaired in this area due to access restrictions and to surface disturbance.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 28,395 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. Development of 180 acres of perlite deposits to the south of the existing mine would be foregone. These acres represent the surface manifestation of deposits which are probably more extensive laterally underground. This would constitute no impact (Group-4, Class-3)(Fig. 4-1). No exploration or development would occur except on claims having valid discoveries at the time of designation. The practical effect of this on perlite availability is nil, as the market for perlite is limited and the supply large. Development of perlite on the claimed area to the northeast would be unimpeded (Group-4, Class-2).

Leasable Minerals

All lands within the 28,395 acres recommended as suitable for wilderness designation would be withdrawn from all forms of leasing under the mineral leasing laws if surface occupancy is required. No geothermal potential exists and the majority of the area is unleased for oil and gas. The U.S. Geological Survey identifies the area as having speculative hydrocarbon potential. Due to a lack of known resources or convincing evidence thereof, no desire to explore is anticipated. Therefore, designation would have no impact on oil and gas exploration or development.

Salable Minerals

Sand and gravel resources are present in large quantities regionally and on the fringes of the WSA but market demand is low and no permits would be issued (Group-4, Class-2).

Conclusion

Current perlite mining adjacent to the WSA is a marginally economic proposition due to market factors. This alternative would permit similar development within the WSA to the north of the existing mine and preclude a minor perlite development opportunity to the south. Interest in leasable and salable mineral development are not anticipated due to lack of known resources and/or markets. Therefore, no impact to exploration would occur.

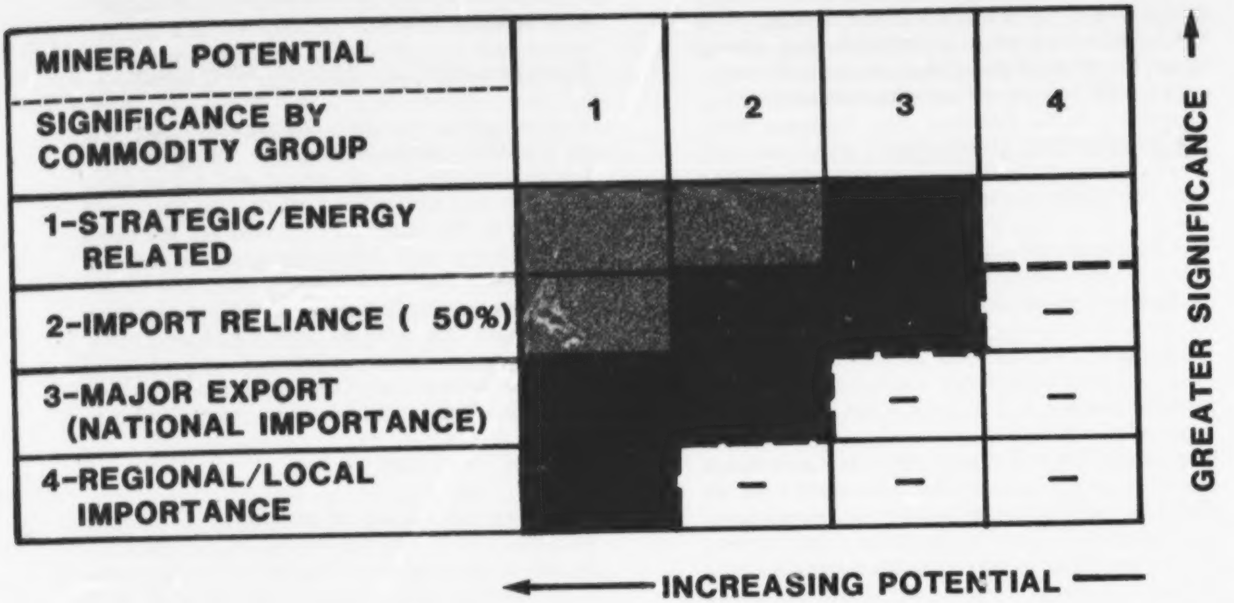
Adverse Impacts Which Cannot Be Avoided

The unavoidable adverse impact would be the loss of wilderness values due to mining exploration and development on the area recommended as nonsuitable.

Relationship Between Local Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

On the 28,395 acres designated as wilderness, wilderness values would be totally protected. On the 205 acres not designated as wilderness, future use for perlite mining would ensue, continuing until either resource exhaustion or economics caused cessation. Wilderness values on these acres would be substantially impaired.

Figure 4-1 Threshold Level of Significant Impact



MINERAL POTENTIAL SIGNIFICANCE BY COMMODITY GROUP	1	2	3	4
1-STRATEGIC/ENERGY RELATED	▨	▨	■	
2-IMPORT RELIANCE (50%)	▨	■	■	—
3-MAJOR EXPORT (NATIONAL IMPORTANCE)	■	■	—	—
4-REGIONAL/LOCAL IMPORTANCE	■	—	—	—

Key

——— THRESHOLD, SIGNIFICANT IMPACT

– – – THRESHOLD, IMPACT

▨ SIGNIFICANT IMPACT

■ SOME IMPACT, NOT SIGNIFICANT

— NO IMPACT

NOTE: Refer to Appendix Tables 3-1 and 3-2 for definition and classification.

This scale is based on data available at the time of Preliminary Final Environmental Impact Statement completion, is not predictive and is subject to revision following the USGS/BM evaluation of mineral potential of those areas not having presently significant data.

Irreversible and Irretrievable Committments of Resources

On the 28,395 acres designated as wilderness, an irreversible or irretrievable commitment of development opportunity of a perlite deposit would occur. On the 205 acres not designated as wilderness, perlite exploration and mining would create an irreversible or irretrievable commitment of physical wilderness resources.

All Wilderness Alternative

Suitable: 28,600 acres, Nonsuitable: 0 acres

The All Wilderness alternative recommends all of the South Pahroc Range WSA as suitable for wilderness designation.

Impacts on Wilderness Values

Naturalness

Nowhere in the WSA is the hand of man evident except for aboriginal material. A slight positive effect on naturalness would occur from preclusion of ORVs on the fan slopes and the consequent prevention of new way development. Similarly, no surface disturbance would occur on the east-central side of the WSA in conjunction with mining exploration for perlite.

However, an area of approximately 170 acres of mining claims on the northeastern side of the WSA would be developed. This would result in construction of one-third mile of road and disturbance of twenty to thirty acres of surface, destroying naturalness thereon. Because of the visibility of the disturbed areas from adjacent sections, naturalness would be affected in varying degrees ranging from total loss in nearby areas, to slight impairment in the more distant ones. This would affect another one hundred acres or so.

There are no cherrystem roads and closing and rehabilitating a 1.1 mile way which extends from the north boundary would improve naturalness. In the immediate vicinity of boundary roads, motorized recreational use would occur on an occasional basis and would slightly reduce naturalness by introducing noise and mechanical conveyances. This would affect naturalness and solitude.

Wilderness designation would withdraw the area from mineral entry and preclude casual exploration activities which inevitably occur over time and which generally impair naturalness in their vicinity.

Solitude:

Outstanding solitude would persist for the long term and would be unimpaired except when the mine portal is being developed. Due to the type of terrain, even this would be a minor, short-term and localized effect.

Primitive and Unconfined Recreation:

By precluding anticipated exploration for perlite on the WSA's east-central side, this alternative would preserve the abundant and outstanding primitive and unconfined recreation resources present at this location. Included are excellent backpacking and dayhiking and the eastern escarpment offers challenging mountain climbing. Rock scrambling or climbing are available throughout this area as well as photographic opportunities. These recreation opportunities would be substantially impaired on two hundred acres due to the disturbance caused by mining.

Special Features:

Supplemental values of botanical, zoological and geological interest would be retained on 26,205 acres. These include regionally rare white fir and aspen, possible northern spotted bats and rounded, stacked boulders.

Conclusion

Designation of 28,600 acres recommended as suitable would preserve excellent opportunities for solitude, primitive and unconfined recreation, highly scenic geologic features and stands of regionally rare white fir and aspen in an unusual setting.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 28,600 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. Development of 180 acres of perlite deposits located on the northeastern side of the WSA, south of the existing Paramount Perlite Mine, would not take place (Group-4, Class-3). These deposits represent the surface manifestation of deposits which are probably more extensive laterally underground. No exploration or development would occur except on claims having valid discoveries at the time of designation. The practical effect of this on perlite availability is nil, as the market for perlite is limited and the supply is large. Production of perlite would occur on portions of 170 acres of claims on the WSA's northeastern side.

Leasable Minerals

All lands within the 28,600 acres recommended as suitable would be withdrawn from all forms of leasing under the mineral leasing laws if surface occupancy is required. No geothermal potential exists and the majority of the area is unleased for oil and gas. The U.S. Geological Survey identifies the area as having speculative hydrocarbon potential. Due to a lack of known resources or convincing evidence thereof, no desire explore is anticipated. Therefore, designation would have no impact on oil and gas exploration or development.

Salable Minerals

Sand and gravel resources are present in large quantities regionally and on the fringes of the WSA but market demand is low and no permits would be issued.

Conclusion

Current perlite mining adjacent to the WSA is a marginally economic proposition due to market factors. This alternative removes a minor perlite development opportunity to the south of the existing mine. Claims on the WSA's northeastern side would probably prove to be valid and development would ensue there. Interest in leasable and salable mineral development are not anticipated due to lack of known resources and/or markets. Therefore, no impact to exploration would occur.

No Wilderness Alternative

Suitable: 0 acres, Nonsuitable: 28,600 acres

The No Wilderness alternative recommends all of the South Pahroc Range WSA as nonsuitable for wilderness designation.

Impacts on Wilderness Values

Naturalness:

Activities occurring in the area would be relatively limited as a consequence of its topography and physical features, and due to a lack of economic resource enticements. Most of these activities would be limited to the edges of the WSA.

ORV access would continue on a 1.1 mile way which extends from the northern boundary. Other off-road travel on adjacent areas may ensue from this access as well. This would result in deterioration of naturalness near the way. Perlite mining in the northeastern corner of the WSA would cause one-third mile of road and twenty to thirty acres of disturbance. To the south of the existing perlite mine, the WSA would sustain fifteen acres of disturbance associated with perlite exploration. Another one hundred acres would be affected within the viewshed. ORV use of mining exploration access, mostly by hunters, would cause localized loss of naturalness. Two helicopter installed and serviced small electronic sites would be placed by the Air Force on the eastern ridgeline, causing limited localized effects on naturalness.

Solitude:

ORV use of mining exploration access, mostly by hunters, and sporadic vehicle use on the way in the northern end of the WSA, would cause occasional localized impairment of solitude as would installation and service of small electronic facilities by helicopter. Mine portal development would result in temporary loss of solitude. Due to the type of terrain, even this would be a minor, short-term and localized effect. Outstanding solitude would persist for the long term and would be unimpaired with the preceding exceptions.

Primitive and Unconfined Recreation

Primitive recreation opportunities consisting of excellent dayhiking and backpacking, rock scrambling, mountain climbing, and photographic opportunities would persist throughout most of this WSA. Near the way on the north, the mine which would develop on the northeast, and in the vicinity of the mining exploration on the east-central side, primitive recreation would be adversely affected. This amounts to about 2.5 percent of the WSA, most of which is confined to the lower value portions of it.

Special Features:

Supplemental values of zoological and geological interest would be retained on most of the area. Localized losses would occur on a few acres. These features include possible northern spotted bats and rounded stacked boulders.

Conclusion

Because of the lack of economic enticements and the area's forbidding plethora of large boulders, most wilderness values would remain intact. Ninety-eight percent of the area would remain undisturbed. Around the fringes, mining, casual mining exploration and hunting ORV use would limitedly reduce wilderness values. Long-term physical changes would occur on twenty to thirty acres of the WSA's northeastern side, where mining would develop one-third mile of road and a portal and staging area for an underground mine. Naturalness would be affected on these acres and on the surrounding one hundred acres of viewshed. Solitude would be affected on these acres in the vicinity while mine development was occurring and occasionally during its operations. Primitive recreation opportunities would be impaired in this area due to access restrictions and to surface disturbance. Similar effects would occur from mining exploration on the WSA's east-central side from fifteen acres of surface disturbance and in the surrounding one hundred acres of the viewshed.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 28,600 acres of the WSA would remain available for entry under the mining laws. Eventual development of mining claims on the northeastern corner of the WSA would occur, exploiting perlite deposits there. Potential perlite deposits on the WSA's east-central side would be defined through exploration (Group-4, Class-3).

Leasable Minerals

All lands within the 28,600 acres of the WSA would remain available for entry under the mineral leasing laws. No geothermal leasing is anticipated. Adjacent lowlands are leased for oil and gas but the thick igneous section present and extremely difficult terrain serve to dampen interest and it is unlikely that exploration or development would occur.

Salable Minerals

Sand and gravel resources are present in large quantities on the fringes of the WSA but without market demand and consequently, no permits are likely to be issued.

Conclusion

Perlite mining adjacent to the WSA is a marginally economic proposition due to market factors. Similar development to the north would occur as well as exploration to the south. Leasable and salable mineral exploration or development would not occur due to lack of resource and/or markets.

CLOVER MOUNTAINS WSA (NV-050-0139)

Proposed Action
(Partial Wilderness Alternative)

(Suitable: 84,165 acres, Nonsuitable: 770 acres)

The Proposed Action recommends nearly all of the Clover Mountains WSA as suitable for wilderness designation. This includes the majority of the Cottonwood Creek watershed. An area of mining claims within the WSA on its northwestern side is recommended as nonsuitable. Along Meadow Valley Wash where developments including a railroad, access road and utility lines are established, a narrow strip has been recommended nonsuitable.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

A positive effect on naturalness would accrue in that the occasional ORV access up lower Cottonwood Creek would cease. There are no cherrystem roads present. Casual mineral exploration would be precluded, preserving naturalness in an area which is unmarred by man except for cattle damage in the Cottonwood Creek complex, activity and equipment next to the Pennsylvania Mining district and an historic homestead. Outstanding naturalness prevails and would be retained by designation.

Five and one-half miles of fence separating portions of the Sheep Flat and Cottonwood allotments would be built, disrupting naturalness on about sixty-seven acres in its vicinity. Two miles of existing fences would be maintained and would affect naturalness on about twenty acres in the vicinity.

The popularity of this area would result in probable overuse in the particularly attractive portions like Pine Creek. This would result in localized loss of naturalness due to the presence of people and surface disturbance in areas of congregation.

Wilderness designation would withdraw the area from mineral entry and preclude casual exploration activities which inevitably occur over time.

Naturalness (Nonsuitable Portion):

There are approximately six hundred acres on the hillside above Pine Creek external to the WSA's northwestern side. Progression of activities from the Pennsylvania Mining district into this area would affect naturalness in upper Pine Creek. These activities would also disturb approximately 30 of the 710 acres recommended as nonsuitable. Naturalness would be impaired in the area directly affected and in the surrounding area from which the disturbance can be seen. Along Meadow Valley Wash, two sand and gravel pits would be developed disturbing long-term naturalness on a total of twenty acres of the sixty acres recommended as nonsuitable. Owing to the topographic aspects of the vicinity, the extent of these effects would be limited.

Solitude (Suitable Portion):

Except for rare instances, the outstanding solitude would be unimpaired due to the WSA's large size, boundary free of narrow protrusions, high and varied relief topography, and thick, arboreal vegetation. Fence construction would cause a short-term temporary impairment of solitude in the vicinity. The popularity of this area would result in concentrated use in the particularly attractive portions such as Pine Creek and other portions of the Cottonwood Creek drainage. During high visitation seasons, this would impair solitude in localized areas. Closing the access which occurs in the lower end of Cottonwood Creek would result in improving opportunities for solitude which are infrequently interrupted there.

Solitude (Nonsuitable Portion):

Activities in the WSA's northwest associated with mining, in addition to activities external to the WSA, would cause occasional disruption of solitude but the effects would be limited areally and temporally. Operations on the sand and gravel pits would cause long-term intermittent disruption of solitude on approximately 500 acres at each location.

Special Features (Suitable Portion):

Botanical values, which include a change in vegetation type from ponderosa pine at the upper end of the Pine-Cottonwood Creek system to cactus, yucca and other low desert shrubs, would receive an extra level of protection for the long term under designation. Similar protection would accrue for a rare stand of aspen which grows in the eastern portion of the WSA.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Primitive and unconfined recreation opportunities consisting of dayhiking, backpacking and photography would be depreciated in the vicinity of the mining activity on the northwestern side. This would affect approximately 500 acres.

Conclusion

Designation of 84,165 acres recommended as suitable would preserve outstanding wilderness values of naturalness, solitude, primitive recreation, supplemental botanical values and nearly an entire flowing stream system in a protective status. An opportunity for a primitive hike through an ecosystem ranging from ponderosa pines to yuccas and cacti, would be included. Some loss of naturalness and opportunities for solitude would occur in areas of concentrated use in limited sections of Pine Creek.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 84,165 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. The 770 acres recommended as nonsuitable would remain available for entry under these laws.

Exploration would continue on mining claims in the 710 acres on the WSA's northwestern side and adjacent to the Pennsylvania Mining district. Past production from the district was minor and available data indicate future prospects within the WSA to be marginal as well. Development on these claims is not anticipated due to lack of economic promise. Along the extreme western side of the WSA, there are some areas considered favorable for the occurrence of silica sand and chemical grade limestone. Because of distance to markets and large deposits much nearer to potential markets, development of these deposits is considered unlikely. In the southwest is an area of potential barite which is not known to be economic and for which no development is anticipated due to better prospects elsewhere and the generally low value of barite. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Leasable Minerals

All lands within the 84,165 acres recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. The 770 acres recommended as nonsuitable for wilderness designation would remain available. Exploration or development are not anticipated in the area recommended as nonsuitable due to the volcanic cover, unknown presence of source or reservoir rock, high costs associated with exploration and drilling, the WSA's location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

Sand and gravel resources exist in the WSA but without substantial demand due to remoteness of markets. However, in that portion of the WSA adjacent to Meadow Valley Wash recommended as nonsuitable, convenience to points of use by the railroad, county road crews and local residents are anticipated to result in the development of two pits aggregating twenty acres. No permits would be issued in the area designated as wilderness.

Conclusion

Due to the presence of a nearby mining district, some exploration would occur in the area recommended as nonsuitable adjacent to the district.

Potential barite resources exist but are not anticipated to be developed. Oil and gas, and geothermal potential are not thought to be high enough to warrant exploration. Sand and gravel would be available along Meadow Valley Wash where some minor market potential exists. No impact to the development of mineral resources would occur due to limited potential and/or markets.

Impacts on Motorized Recreation Resources

Wilderness designation would close 84,165 acres of the WSA to motorized recreation, while leaving 710 acres on the northwestern side and 60 acres along Meadow Valley Wash open. Currently, because of the lack of roads, ways and suitable washes, ORV use is minimal. Minor mining exploration road construction on the WSA's northwest would occasion an increase in ORV use to twenty-five visitor-days annually. ORV use adjacent to the road along Meadow Valley Wash would remain near the current level of twenty-five visitor-days annually. Approximately ten visitor-days of motorized recreation use annually would be eliminated from the WSA by stopping the minor usage along the WSA's southern boundary and in the lower end of Cottonwood Canyon. Cottonwood Canyon is entered occasionally by digging under the railroad's bridge to cross the tracks and driving up the wash using undamaged portions of an old way in combination with the wash. Entry under the tracks is frequently unavailable due to flood deposits. Total change in ORV use would be an increase from the present thirty-five to fifty visitor-days annually.

There are no cherrystem roads. Four miles of wash would be closed. Other than as mentioned, access to motorized vehicles is extremely limited and public lands offering similar opportunities are readily available throughout the region.

Conclusion

Motorized recreational use of approximately ten visitor-days annually would be displaced from the WSA. The impact of shifting this use to other public lands would negligible. The current use of twenty-five visitor-days in the narrow strip of the WSA adjacent to the Meadow Valley Wash road would remain about the same, while an additional twenty-five visitor-days of use would arise as a result of mining road construction. Thus total motorized use would be fifty visitor-days annually.

Impacts on Production of Deer

The current full fire suppression policy would remain in effect unless modified in subsequent fire management plans. On the WSA's southeastern slopes, pinyon-juniper conversion to browse seeding on half of 13,440 acres would not be permitted. Consequently, an opportunity to increase deer numbers in the area by ten percent would be foregone.

Conclusion

Deer numbers may not be increased by ten percent through vegetation conversion and seeding with non-local species for browse.

Impacts on Water Quality

Protection from surface disturbance from mineral exploration would occur on 84,165 acres of the WSA. This acreage comprises the entire Cottonwood Creek watershed with the exception of two areas aggregating approximately 1,310 acres on the WSA's northwestern side and 3,330 acres in the Fife Spring vicinity on the WSA's northeastern side. On the northwestern side, there are 600 acres external to the WSA and 710 acres within its boundary. The 710 acres and a portion of the 600 acres are encumbered by mining claims The 710 acres are recommended as nonsuitable for wilderness designation. Approximately thirty acres of surface disturbance is expected due to exploration activities. This could contribute to occasional temporary increases in turbidity and sediment load in Pine Creek, which is tributary to Cottonwood Creek, during heavy precipitation events. Since the Cottonwood system already has heavy sediment loads and is prone to flash flooding it is doubtful that the contribution from these disturbed thirty acres would be readily identifiable. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

Conclusion

Except for 4,640 acres, all of the Cottonwood Creek watershed would be included in designated wilderness. Activities on 710 acres of mining claims within the WSA are expected to result in thirty acres of surface disturbance. The resulting increased sediment mobilization would not be detectable in view of the already high sediment load in this stream system during high precipitation events. Aside from flooding, the major effect on the water quality parameters of turbidity, BOD, nutrients and probably fecal coliforms would continue to be grazing by domestic livestock and wild horses.

Adverse Impacts Which Cannot Be Avoided

The unavoidable adverse impact would be the loss of wilderness values on fifty acres recommended as nonsuitable due to mining exploration and sand and gravel operations.

Relationship Between Local Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

On the 84,165 acres designated as wilderness, wilderness values would be totally protected. On portions of 770 acres not designated, all present uses would continue. Mining exploration, mining claim assessment work and sand and gravel pit operation would destroy wilderness values.

Irreversible and Irretrievable Commitments of Resources

On the 84,165 acres designated as wilderness, irreversible and irretrievable commitments of wilderness values are not expected. On the 770 aces not designated, mining activities and sand and gravel operations would create an irreversible and irretrievable commitment of physical wilderness resources.

All Wilderness Alternative

(Suitable: 84,935 acres, Nonsuitable: 0 acres)

The All Wilderness alternative recommends the entire Clover Mountains WSA as suitable for wilderness designation. This includes all but approximately 3,930 acres of the Cottonwood Creek watershed.

Impact on Wilderness Values

With this alternative, all 84,935 acres of the Clover mountains WSA would receive special legislative protection.

Naturalness:

There are no cherrystem roads present and a positive effect on naturalness would accrue in that the occasional naturalness impairing ORV access up lower Cottonwood Creek would cease. There are no cherrystem roads present. Casual mineral exploration would be precluded, preserving naturalness in an area which is unmarred by man except for cattle damage in the Cottonwood Creek complex, activity and equipment next to the Pennsylvania Mining district and an historic homestead. Outstanding naturalness prevails and would retained by designation.

Five and one-half miles of fence separating portions of the Sheep Flat and Cottonwood allotments would be built, disrupting naturalness on about sixty-seven acres in its vicinity. Another two miles of existing fences would be maintained and would affect naturalness on about twenty acres in their vicinity.

The popularity of this area would result in probable overuse in the particularly attractive portions like Pine Creek. This would result in localized loss of naturalness due to the presence of people and surface disturbance in areas of congregation.

Exploration activities in the Pennsylvania Mining district near the WSA, would also extend into the area adjacent but external to the WSA. This would have an effect on naturalness in upper Pine Creek but the effects would be limited areally and temporally. This alternative also includes as suitable, 710 acres which are encumbered with mining claims and which may suffer some exploration damage prior to designation. Naturalness would be affected for the long term but, since these claims are not expected to be valid, damage would be limited to approximately five acres and would be rehabilitated eventually. Wilderness designation would withdraw the suitable area from mineral entry and preclude casual exploration activities which inevitably occur over time. This would preserve naturalness over the long term.

Along the road in Meadow Valley Wash, some naturalness would be damaged due to vehicles pulling off the road to park. This impact would be very limited.

Solitude:

Except for rare instances, the outstanding solitude would be unimpaired due to the WSA's large size, boundary free of narrow protrusions, high and varied relief topography, and thick, arboreal vegetation. Fence construction would cause a short-term temporary impairment of solitude in the vicinity. The popularity of this area would result in concentrated use in the particularly attractive portions such as Pine Creek and other portions of the Cottonwood Creek drainage. During high visitation seasons, this would impair solitude in localized areas. Closing the access which occurs in the lower end of Cottonwood Creek would result in improving opportunities for solitude which are infrequently interrupted there.

Activities in the nearby Pennsylvania Mining district would cause intermittent, long-term impairment of solitude in the far northwest of the WSA. As the mining claims on the WSA's northwestern side are not expected to be valid, designation would cause a cessation of activities there and solitude would remain readily available.

The popularity of this area would result in probable overuse in the particularly attractive portions such as Pine Creek. This would result in a lowering of opportunities for solitude in portions of the drainage unless visitation limits were imposed. Even with limits, solitude would be reduced.

Primitive and Unconfined Recreation:

Outstanding primitive and unconfined recreation are available and would be retained in a protective status. These opportunities include excellent dayhiking and backpacking for extended trips. Other opportunities include excellent photography, nature study, horseback riding and hunting for mule deer. Supplemental values of botanical interest are also available.

Special Features:

Botanical values, which include a change in vegetation type from ponderosa pine at the upper end of the Pine-Cottonwood Creek system to cactus, yucca and other low desert shrubs, would receive an extra level of protection for the long term under designation. Similar protection would accrue for a rare stand of aspen which grows in the eastern portion of the WSA.

Conclusion

Designation of 84,935 acres recommended as suitable would preserve outstanding wilderness values of naturalness, solitude, primitive and unconfined recreation opportunities, supplemental botanical values and nearly an entire flowing stream system in a protective status. An opportunity for a primitive hike through an ecosystem ranging from ponderosa pines to yuccas and cacti, would be included. Some loss of naturalness and opportunities for solitude would occur in areas of concentrated use in limited sections of Pine Creek.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 84,935 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. Exploration would cease on mining claims in the 710 acres on the WSA's northwest. Development on these claims is not anticipated due to lack of economic promise. Along the extreme western edge of the WSA are areas considered favorable for silica sand and chemical grade limestone. Because of distance to markets and large deposits much nearer to potential markets, development of these deposits is not anticipated. In the southwest is an area of potential barite which is not known to be economic and for which no development is anticipated due to better prospects elsewhere and the generally low value of barite. Within the area of the WSA, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Leasable Minerals

All lands within the 84,935 acres recommended as suitable would be withdrawn from all forms of leasing under the mineral leasing laws if surface occupancy is required. The U.S. Geological Survey identifies the area as having speculative hydrocarbon potential. Exploration on existing post-FLPMA leases is not anticipated due to the thick volcanic cover, unknown presence of source or reservoir rock, high costs associated with exploration, the WSA's location outside of a known oil and gas province and the better potential for discovery in more favorable areas. No geothermal potential exists. Due to a lack of known resources or convincing evidence thereof, no desire to explore is anticipated. Therefore, designation would have no impact on oil and gas exploration or development.

Salable Minerals

Sand and gravel resources exist in the WSA but without substantial demand due to remoteness of markets (Group-4, Class-2). However, in portions of the WSA adjacent to Meadow Valley Wash, convenience to points of use by the railroad, county road crews and local residents creates a low-level demand. As this is in the area recommended as suitable in this alternative, this demand would have to be met from other sources which are abundant within the region. No permits would be issued in the WSA.

Conclusion

Due to the presence of a nearby mining district, some exploration would occur in the area recommended as suitable adjacent to the district. Past production from the district was minor and available data indicate future prospects within the WSA to be marginal as well.

Potential barite resources exist but are not anticipated to be developed. Oil and gas and geothermal potential are not thought to be high enough to warrant exploration. Sand and gravel would be unavailable along the Meadow Valley Wash portion of the WSA where some minor market potential exists. No impact to the development of mineral resources would occur due to limited potential and/or markets.

Impacts on Motorized Recreation Resources

Wilderness designation would close 84,935 acres of the WSA to motorized recreation. Currently, because of the lack of roads, ways and suitable washes, ORV use is minimal. ORV use adjacent to the road along Meadow Valley Wash would be reduced from the current level of twenty-five visitor-days to nearly zero. Approximately ten visitor-days of motorized recreation use annually would be eliminated from the WSA by stopping the minor usage along the southern boundary and in the lower end of Cottonwood Canyon. Cottonwood Canyon is entered occasionally by digging under the railroad's bridge to cross the tracks and driving up the wash using undamaged portions of an old way in combination with the wash. Entry under the tracks is frequently unavailable due to flood deposits. Approximately thirty-five visitor-days of motorized recreation annually would be eliminated from the WSA.

There are no cherrystem roads. Four miles of wash would be closed. Other than as mentioned, access to motorized vehicles is extremely limited and public lands offering similar opportunities are readily available throughout the region.

Conclusion

Motorized recreational use of approximately thirty-five visitor-days annually would be displaced from the WSA. The impact of shifting this use to other public lands would be negligible. The current use of twenty-five visitor-days in the narrow strip of the WSA adjacent to the Meadow Valley Wash road would be almost entirely eliminated. Total motorized use would be zero.

Impacts on Production of Deer

The current full fire suppression policy would remain in effect unless modified in subsequent fire management plans. On the WSA's southeastern slopes, pinyon-juniper conversion to browse seeding on half of 13,440 acres would not be permitted. Consequently, an opportunity to increase deer numbers in the area by ten percent would be foregone.

Conclusion

Deer numbers may not be increased by ten percent through vegetation conversion and seeding with non-local species for browse.

Impacts on Water Quality

Protection from surface disturbance from mineral exploration would occur on 84,935 acres of the WSA. This acreage comprises the entire Cottonwood Creek watershed with the exception 600 acres on the northwest and 3,330 acres on the northeast. Within its boundary are 710 acres which are encumbered by mining claims. Exploration may continue on these claims prior to designation, although they are not expected to be developed. Approximately five acres of surface disturbance would be expected from exploration activities. This could contribute to occasional increases in turbidity and sediment load in Cottonwood Creek during heavy precipitation events. Since the Cottonwood system already has heavy sediment loads and is prone to flash flooding it is doubtful that the contribution from these disturbed thirty acres would be readily identifiable. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

Conclusion

Except for 3,870 acres, all of the Cottonwood Creek watershed would be included in designated wilderness. Activities on 710 acres of mining claims within the WSA are expected to result in five acres of surface disturbance. The additional sediment mobilization above that which currently exists would not be detectable in view of the distance to the stream and the already high sediment load it has during high precipitation events. Aside from flooding, the major effect on the water quality parameters of turbidity, BOD, nutrients and probably fecal coliforms would continue to be grazing by domestic livestock and wild horses.

No Wilderness Alternative

(Suitable: 0 acres, Nonsuitable: 84,935 acres)

The No Wilderness alternative recommends 84,935 acres of the Clover Mountains WSA as nonsuitable for wilderness designation.

Impacts on Wilderness Values

Naturalness:

Except for an area of mining claims on the WSA's northwest and an area of former mining claims in Horse Pasture and Horse Springs canyons, there is little economic incentive to develop access into the WSA. Occasional ORV access from the mouth of Cottonwood Creek, approximately four miles into the WSA would continue. Access from exploration roads constructed in the northwest adjacent to the Pennsylvania Mining district and which may be constructed in the Horse Pasture/Horse Springs Area, would disturb naturalness over approximately one hundred acres. Exploration would cause approximately thirty acres of surface disturbance on the northwestern side of the WSA and approximately ten acres of surface disturbance in the Horse Pasture/Horse Springs area of the south-central section of the WSA. Loss of naturalness would ensue in the immediate areas of disturbance.

Burning for wildlife habitat development in the WSA's southeastern area would alter the current "naturalness" there by converting 6,720 acres of pinyon-juniper to browse species which would be seeded following the fire. The ensuing patchwork of open areas, islands and fingers of trees would assume the landscape character which prevailed prior to the exclusion of fire.

In the remainder of the WSA, outstanding naturalness would be conserved with some exceptions. On the slope adjacent to Meadow Valley Wash, terrain would preserve naturalness except on the lowermost slopes where two sand and gravel pits totaling twenty acres would be developed. Occasional operations on these would disturb naturalness over the long term. On the southeastern and eastern side, lack of incentive to construct access would result in retention of most of the area's naturalness over the long term except in those portions bordering roads or ways. In those areas, some decrease in naturalness would occur due to activities on and adjacent to areas of vehicular access.

Solitude:

Occasional mining related activity on the northwestern and south-central regions would cause an intermittent long-term effect on solitude. ORV use up the lower end of Cottonwood Creek and on mining exploration access roads would cause intermittent long-term impairment of solitude.

In the remainder of the WSA, outstanding solitude would be conserved with some exceptions. On the slope adjacent to Meadow Valley Wash, terrain would preserve these values except on the lowermost slopes where occasional operations on two sand and gravel pits would disturb naturalness over the long term. On the southeastern and eastern sides, lack of incentive to construct access would result in retention of most of the outstanding opportunities for solitude over the long term except in those portions bordering roads or ways. In those areas, some decrease in solitude would occur due to activities on and adjacent to areas of vehicular access.

Primitive and Unconfined Recreation:

Except for those areas where mining exploration would develop access and in the lower end of Cottonwood Creek, primitive and unconfined recreation opportunities would remain of a generally high value. On the slope adjacent to Meadow Valley Wash, terrain would preserve them except on the lowermost slopes where occasional operations on two sand and gravel pits would impact opportunities over the long term. On the southeast and eastern side, lack of incentive to construct access would result in retention of most of the primitive and unconfined recreation opportunities over the long term, except in those portions bordering roads or ways. In those areas, occasional vehicle-related recreational activities on and adjacent to areas of access would depreciate primitive and unconfined recreation.

Special Features:

Botanical values include a change in vegetation type from ponderosa pine at the upper end of the Pine-Cottonwood Creek system to cactus, yucca and other low desert shrubs. A rare stand of aspen grows in the eastern portion of the WSA. The lower end of the drainage would be susceptible to damage from access construction which would depreciate enjoyment of these features. The aspen stand would also receive less certain protection under this alternative.

Conclusion

Wilderness values would remain in the majority of the area except for occasional localized losses of naturalness and solitude on approximately 5,700 acres. Primitive recreation experiences would be somewhat lessened due to occasional ORV encounters and loss of naturalness and solitude.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 84,935 acres recommended as nonsuitable would remain open for entry under the mining laws. Exploration would continue on mining claims in the 710 acres on the WSA's northwestern side. Permanent access would be developed and approximately thirty acres would be disturbed. Development on these claims is not anticipated due to lack of economic promise. In the south-central area of the WSA in Horse Pasture and Horse Springs Canyons, are abandoned barite claims. In the foreseeable future, temporary access would be developed and exploration activities would disturb approximately ten acres here. However, development is not expected due to better prospects elsewhere and the generally low value of barite. Along the WSA's extreme western boundary are some areas favorable for the occurrence of silica sand and chemical grade limestone. Development of these resources is not expected because of the abundance of similar resources available much nearer to markets. Casual exploration would disturb another five acres scattered around the WSA's southern, southeastern and northwestern sides where access exists from bordering roads and ways.

Leasable Minerals

All lands within the 84,935 acres recommended as nonsuitable would remain open to leasing under the mineral leasing laws. Exploration and development are not anticipated due to the thick volcanic cover, unknown presence of source or reservoir rock, high costs associated with exploration and drilling, the WSA's location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

Sand and gravel resources exist in the WSA but without substantial demand due to remoteness of markets. However, in that portion of the WSA adjacent to Meadow Valley Wash, convenience to points of use by the railroad, county road crews and local residents would result in the development of two pits totaling twenty acres in size.

Conclusion

Due to the presence of a nearby mining district, some exploration would occur in the area adjacent to the district. Past production from the district was minor and available data indicate future prospects within the WSA are marginal as well.

Potential barite resources exist but are not known to be economic. Hydrocarbon and geothermal potential are not thought to be high enough to warrant exploration. Sand and gravel would be available along Meadow Valley Wash where some minor market potential exists. Mineral resources would remain available for development, but are not thought to be substantial due to limited potential and/or markets.

Impacts on Motorized Recreation Resources

With a nonsuitable recommendation, 84,935 acres of this WSA would remain open for motorized recreation. Currently, because of the lack of roads, ways and suitable washes, ORV use is minimal. There is some minor usage along the WSA's southern boundary which would continue. The lower end of Cottonwood Canyon is entered occasionally, by digging out under the railroad's bridge to cross under the tracks and drive up the wash using undamaged portions of an old way in combination with the wash. Entry under the tracks is frequently unavailable due to flood deposits. Two to three miles of mining exploration roads would be opened. Approximately 35 visitor-days of motorized recreation use annually would be continued and would increase over time to 110 visitor-days. There are no cherry-stem roads. Five and one-half miles of wash would remain open. Other access to motorized vehicles is extremely limited, and public lands offering similar opportunities with better access are readily available throughout the region.

Conclusion

Motorized recreation use would rise slightly, due both to regional population growth and the minor increase in access due to mining exploration roads. Primitive recreation use would rise for the same reasons. Annual motorized recreational use would reach 110 visitor-days.

Impacts on Production of Deer

The current full fire suppression policy would remain in effect unless modified in subsequent fire management plans. On the south-facing slopes on the WSA's southeastern side, the present continuous pinyon-juniper stands would be modified by prescribed burning. Approximately 6,720 acres would be burned within an area of 13,440 acres to produce a maximized edge effect. Browse species would be seeded into the burn. As a result, deer habitat productivity would rise and deer populations would increase by an estimated ten percent.

Conclusion

Deer numbers would increase an estimated ten percent.

Impacts on Water Quality

Within the WSA boundary on the northwestern side are 710 acres encumbered by mining claims. Approximately thirty acres of surface disturbance is expected on this area due to exploration activities. This could contribute to occasional temporary increases in turbidity and sediment load in Cottonwood Creek during heavy precipitation events. Since this system already has a heavy sediment load and is prone to flash flooding, it is doubtful that the contribution from these thirty acres would be readily identifiable. Similarly, exploration activities for barite, disturbing ten acres in the Horse Pasture and Horse Springs Canyons, could contribute additional sediment to Cottonwood Creek. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

Conclusion

This alternative would permit mining exploration with fewer surface disturbance or other operational restrictions and fewer reclamation requirements than would be the case if the area were designated as wilderness. As nonsuitable for wilderness, mining plans would not receive the close scrutiny that plans in WSAs or designated wilderness would. Less concern for minimizing surface disturbance is evidenced and reclamation to natural conditions to the maximum extent possible is not required. These relaxed requirements could allow greater sediment mobilization and a slightly enhanced risk of toxic materials escape. The major effect on water quality would continue to be grazing by domestic livestock and wild horses.

Resource Development Alternative

(Suitable: 53,090 acres, Nonsuitable: 31,845 acres)

The Resource Development alternative recommends as suitable for wilderness designation lands within the Cottonwood Creek watershed only. Recommended as nonsuitable are all lands tributary to drainages other than the Cottonwood Creek complex and any lands within the complex showing any evidence of mineral character.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

A positive effect on naturalness would accrue in that occasional ORV access up lower Cottonwood Creek would cease. There are no cherry-stem roads present. Casual mineral exploration would be precluded, preserving naturalness in an area which is unmarred by man except for some cattle damage in the Cottonwood Creek complex, activity and equipment next to the Pennsylvania Mining district and an historic homestead. Outstanding naturalness would be retained on 53,090 acres. Except for some cattle damage in the Cottonwood Creek complex, activity and equipment next to the Pennsylvania Mining district and an historic homestead, the WSA is free of evidence of man.

Three and three-quarters miles of fence separating portions of the Sheep Flat and Cottonwood allotments would be built in the area recommended as suitable and would affect naturalness in the vicinity of the fence.

Naturalness (Nonsuitable Portion):

Exploration activities in the vicinity of the Pennsylvania Mining district would disturb approximately thirty acres of the area recommended as nonsuitable. There is an area in Horse Pasture and Horse Springs Canyons in which claims were staked for barite and subsequently abandoned several years ago. Exploration activity and road construction would disturb approximately ten acres and would impair naturalness on approximately one hundred acres over the long term.

In this alternative, an area of approximately 500 acres along the WSA's northwestern side, lies within the watershed of Pine Creek. Pennsylvania Mining district activities extending into this area could impair naturalness in upper Pine Creek.

Along the WSA's western side, two sand and gravel pits would be developed, totaling twenty acres. Surface disturbing operations on these would disturb naturalness over the long term. However this region is separated from the suitable area by a ridgeline.

On the southeastern and eastern sides, where most of the area recommended as nonsuitable lies, lack of incentive to construct access would result in retention of most of the outstanding naturalness over the long term except in those portions bordering roads or ways. In those areas, some "fraying" of naturalness would occur due to activities on and adjacent to these areas of vehicular access.

Solitude (Suitable Portion):

Outstanding solitude would be preserved. Because the area recommended as suitable lies entirely within Cottonwood Creek Canyon, solitude is readily achievable in the central and northern portions, aided by the topography and vegetation. Fence construction separating portions of the Sheep Flat and Cottonwood allotments would have a short-term impact on solitude in the vicinity of the construction.

Solitude (Nonsuitable):

Intermittent mining related activity on the WSA's northwestern side would cause a long-term loss of solitude in nearby areas. Operations on two sand and gravel pits on the WSA's far western side, would cause occasional impairment of solitude but the steep ridge between the activity and the remainder of the WSA would mitigate the effect. Temporary loss of solitude would occur in the lower Cottonwood drainage from occasional ORV penetration. On the southeastern and eastern sides, proximity to vehicle access would cause occasional long-term impairment of solitude.

Primitive and Unconfined Recreation (Suitable Portion):

Primitive and unconfined recreation opportunities include excellent dayhiking and backpacking for extended trips. Other opportunities include excellent photography, nature study, horseback riding and hunting for mule deer. Designation would preserve these opportunities.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Except for those areas where mining exploration would develop access and on the western side of the WSA, primitive and unconfined recreation opportunities would remain of a generally high value. On the western slope adjacent to Meadow Valley Wash, terrain would preserve them except on the lowermost slopes where occasional operations on two sand and gravel pits would impact these opportunities over the long term. On the southeastern and eastern side, lack of incentive to construct access would result in retention of most of the primitive and unconfined recreation opportunities over the long term except in those portions bordering roads or ways. In those areas, occasional vehicle-related recreational activities on and adjacent to areas of access would depreciate these opportunities.

Special Features (Suitable Portion):

Botanical values, including a change in vegetation type from ponderosa pine at the upper end of the Pine-Cottonwood Creek system to cactus, yucca and other low desert shrubs, would receive more certain protection with this alternative.

Special Features (Nonsuitable Portion):

A rare stand of aspen grows in the eastern portion of the WSA and would not receive the protection conveyed by wilderness designation.

Conclusion

In the area recommended as suitable, 53,090 acres of outstanding wilderness values of solitude, naturalness and primitive recreation and a large portion of a flowing stream system would be retained in a protective status. An ecosystem extending from ponderosa pines to yuccas and cacti, would be included. Supplemental botanical values would also be preserved. Due to the presence of lands not designated as wilderness within the Cottonwood Creek complex, intrusions and occasional impairment of solitude could occur in portions of the designated area. In the area recommended as nonsuitable, outstanding wilderness values of naturalness and solitude would be preserved except where mining exploration, sand and gravel removal and ORV use would impair them on 3,200 acres.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 53,090 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. The 31,845 acres recommended as nonsuitable would remain available for entry under these laws.

Exploration would continue on mining claims on the 710 acres on the WSA's northwestern side in the area recommended as nonsuitable. Development on these claims is not anticipated due to lack of economic promise. Horse Pasture and Horse Springs Canyons are in the area recommended as nonsuitable and contain abandoned barite claims. In the foreseeable future, exploration activities would disturb approximately ten acres and result in road construction. Development is not expected, however. Along the extreme western boundary of the WSA are areas that are favorable for silica sand and chemical grade limestone. Development of these resources is not anticipated because of abundant deposits located much closer to markets. Casual exploration would test areas scattered around the WSA's southern, southeastern and northwestern sides where access exists from bordering roads or ways. Exploration would cease within the area designated as wilderness unless a valid discovery existed at the time of designation.

Leasable Minerals

Lands within the 53,090 acres recommended as suitable would not be available for leasing under the mineral leasing laws where surface occupancy is required. The 31,845 acres recommended as nonsuitable would remain open under the mineral leasing laws. Exploration or development are not anticipated in the area recommended as nonsuitable due to the volcanic cover, unknown presence of source or reservoir rock, high costs associated with exploration and drilling, the WSA's location outside of a known oil and gas province and the better potential for discovery in more favorable areas.

Salable Minerals

Sand and gravel resources exist in the WSA but without substantial market demand due to remoteness of markets. However, in that portion of the WSA adjacent to Meadow Valley Wash and recommended as nonsuitable, convenience to points of use by the railroad, county road crews and local residents would result in the development of two pits totaling twenty acres.

Conclusion

Due to the presence of a nearby mining district, some exploration would occur in the area adjacent to the district. Past production from the district was minor and available data indicate future prospects within the WSA are marginal as well.

Potential barite resources exist but are not known to be economic. Oil and gas and geothermal potential are not thought to be high enough to warrant exploration. Sand and gravel would be available along Meadow Valley Wash where some minor market potential exists. This alternative has minimal impact on mineral development because of the limited potential in the area recommended as suitable, and exclusion of areas on the west and south having some limited potential for locatable minerals and because of the lack of markets for others.

Impacts on Motorized Recreation Resources

Wilderness designation would close 53,090 acres to motorized recreation, while leaving 31,845 acres on the western, southern, southeastern and northeastern sides open. Currently, because of the lack of roads, ways and suitable washes, ORV use is minimal. There is some minor usage in the area recommended as nonsuitable along the WSA's southern boundary which would continue. The lower end of Cottonwood Canyon is entered occasionally, by digging out under railroad's bridge to cross under the tracks and drive up the wash using undamaged portions of an old way in combination with the wash. Entry under the tracks is frequently unavailable due to flood deposits. Two to three miles of mining exploration roads would be opened. Approximately ten visitor-days of motorized recreation use annually would be displaced from the area recommended as suitable and twenty-five visitor-days annually would grow to one hundred visitor-days in the area recommended as nonsuitable. There are no cherrystem roads. Four miles of wash would be closed. Other than as mentioned, access to motorized vehicles is extremely limited so a closure is a minor consequence and public lands offering similar opportunities are readily available throughout the region.

Conclusion

Motorized recreational use of ten visitor-days annually would be displaced in the area recommended as suitable. The impact of shifting this use to other public lands would be negligible. Because of the current limited access, continued use in the area recommended as nonsuitable would remain light, rising slowly from the present twenty-five to one hundred visitor-days in the foreseeable future.

Impacts on Production of Deer

Interest has been expressed in converting approximately half of 13,440 acres of pinyon-juniper stands in southeastern portions of the WSA to a shrub-grassland type more usable to deer. About 1,400 acres of this type are in the area recommended as suitable. The current full fire suppression policy would remain in effect unless modified in subsequent fire management plans. In the area recommended as nonsuitable, on the south-facing slopes on the WSA's southeastern side, the present continuous pinyon-juniper stands would be modified by prescribed burning. Approximately 6,020 acres would be burned within the area of 12,040 acres to produce a maximized edge effect. Browse species would be seeded into the burn. As a result, habitat productivity would rise and deer populations dependent on the area would increase by an estimated ten percent. Fenced exclosures would be constructed at Mudhole and Oil springs to protect the sources. These would be constructed in a manner non-impairing of wilderness.

Conclusion

Deer production would rise about nine percent, benefited by an increase in habitat productivity due to fire created openings and reseedings.

Impacts on Water Quality

In the area recommended as nonsuitable on the northwestern side are 710 acres encumbered by mining claims. Approximately thirty acres of surface disturbance is expected on this area due to exploration activities. This could contribute to occasional temporary increases in turbidity and sediment load in Cottonwood Creek during heavy precipitation events. Since this system already has a heavy sediment load and is prone to flash flooding, it is doubtful that the contribution from these thirty acres would be readily identifiable. Similarly, exploration activities for barite, disturbing ten acres in the Horse Pasture and Horse Springs Canyons, could contribute additional sediment to Cottonwood Creek. Continued grazing by domestic livestock and wild horses would remain the major factor affecting the area's water quality.

Conclusion

This alternative would permit mining exploration with fewer surface disturbance or other operational restrictions and fewer reclamation requirements than would be the case if the area were designated as wilderness. As nonsuitable for wilderness, mining plans would not receive the close scrutiny that plans in WSAs or designated wilderness would. Less concern for minimizing surface disturbance is evidenced and reclamation to natural conditions to the maximum extent possible is not required. These relaxed requirements could allow greater sediment mobilization and a slightly enhanced risk of toxic materials escape. The major effect on water quality would continue to be grazing by domestic livestock and wild horses.

Wilderness Accent Alternative

(Suitable: 86,020 acres, Nonsuitable: 0 acres)

The Wilderness Accent alternative emphasizes maximum wilderness values and recommends as suitable for wilderness designation, all of the Clover Mountains WSA and a 1,080 acre area external to the WSA on the WSA's northwestern side to extend to the Cottonwood Creek watershed divide.

Impacts on Wilderness Values

Naturalness:

Outstanding naturalness would be retained on most of 86,020 acres of the WSA and the adjacent watershed. Except for cattle damage in the Cottonwood Creek complex, activity and equipment next to the Pennsylvania Mining district and an historic homestead, the WSA is free of evidence of man.

Five and one-half miles of fence separating portions of the Sheep Flat and Cottonwood Allotments would be built, disrupting naturalness for the long term in the vicinity.

Between the WSA boundary and the mining district is an area of 1,085 acres recommended as suitable in this alternative. This area currently is natural with no intrusions but a risk exists that exploration activities on mining claims in this area could affect naturalness on approximately ten acres, over the long term, before designation occurs. Exploration would disturb approximately thirty acres within the area recommended as suitable on the northwestern side of the WSA. The effects would be limited areally and temporally.

Due to the addition of 1,085 acres outside the WSA across the ridge from the Pennsylvania Canyon area, most of the Cottonwood Creek complex is included for wilderness designation under this alternative thus adding considerably to the preservation of naturalness. Wilderness designation would withdraw the area from mineral entry and preclude casual exploration which inevitably occurs over time.

There are no cherrystem roads present and closing the access in the lower portion of Cottonwood Creek would stop the impairment of naturalness due to the presence of vehicles.

Solitude:

Solitude is readily achievable due to the WSA's large size, boundary free of narrow protrusions, high and varied relief topography and thick, arboreal vegetation. Outstanding solitude would be retained on most of 86,020 acres of the WSA and adjacent Cottonwood Creek watershed except where the boundary parallels Meadow Valley Wash. There, proximity to the railroad and its associated access road would cause a loss of solitude. Fence construction would also cause a temporary depreciation of solitude opportunities. Exploration activities in the Pennsylvania Mining district near the WSA would cause occasional disruption of solitude in the area adjacent to the WSA.

The popularity of this area would result in concentration of use in the particularly attractive portions such as Pine Creek. This would result in a lowering of opportunities for solitude in portions of the drainage unless visitation limits were imposed. Even with limits, solitude would be reduced. Closure of the access up the lower end of Cottonwood Creek and the additional acreage would greatly increase the ability of users to achieve solitude.

Primitive and Unconfined Recreation:

Primitive and unconfined recreation opportunities include excellent dayhiking and backpacking for extended trips. Other opportunities include excellent photography, nature study, horseback riding and hunting for mule deer.

Special Features:

Botanical values include a change in vegetation type from ponderosa pine at the upper end of the Pine-Cottonwood system, to cactus, yucca and other low desert shrubs. A rare stand of aspen grows in the eastern portion of the WSA. Designation would provide added protection for this vegetation type, particularly in the lower end of Cottonwood Creek where continued access may cause some impairment.

Conclusion

The 86,020 acres of wilderness would receive special legislative protection. Wilderness values of outstanding solitude, outstanding naturalness and primitive recreation, supplemental botanical values and an entire flowing stream system would be retained in a protective status. Some loss of solitude would occur in sections of Pine Creek. A hiking opportunity through an ecosystem extending from ponderosa pines to yuccas and cacti would be included.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 86,020 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. This alternative contains approximately 1,085 acres external to the WSA's northwestern boundary, most of which contain claims. This acreage extends the proposed wilderness to the ridgeline between Pine Creek and Pennsylvania Canyon. Approximately 200 acres of area with high exploration potential associated with the Pennsylvania Mining district extends into the 1,085 acres. Exploration could continue on these mining claims until the time of designation.

After designation, further activity could occur only if a valid discovery existed at the time of designation. If valid discoveries are present, then exploration and development could occur. Development of these claims is not anticipated since it is believed mineralization does not occur in sufficient quantity and/or quality to be economic.

Potential barite resources may occur in unknown quantities in a small area located in the southwestern portion of the WSA. Silica sand and chemical grade limestone may occur in respective quartzite and carbonate rocks which outcrop along the west-central boundary of the WSA. Exploration and development of these is not foreseen because of the remoteness of the potential resource and more exploitable resources being mined elsewhere.

This alternative contains an area with higher mineral exploration potential. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Leasable Minerals

All lands within the 86,020 acres recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required.

Salable Minerals

Sand and gravel resources exist in the WSA but without substantial demand due to remoteness of markets. However, in that portion of the WSA adjacent to Meadow Valley Wash, convenience to points of use by the railroad, county road crews and local residents creates a low level demand. No permits would be issued and this demand would have to be met from other sources which are abundant within the region.

Conclusion

Due to the presence of a nearby mining district, some exploration may occur in the area adjacent to the district and recommended as suitable but external to the WSA. This would amount to some ten acres. Past production from the district was minor and available data indicate future prospects within the WSA to be marginal as well. The exception is some 200 acres of the 1,080 acres external to the WSA but within the area recommended as suitable under this alternative, which has higher exploration potential. If valid discoveries were not made by the time of designation, then no further activity could take place on these claims.

Potential barite resources exist but are not anticipated to be developed. Oil and gas and geothermal potential are not thought to be high enough to warrant exploration. Sand and gravel would be unavailable along the Meadow Valley Wash portion of the WSA where some minor market potential exists. This alternative has minimal impact on mineral development because of the limited potential in the area recommended as suitable except as noted.

Impacts on Motorized Recreation Resources

Wilderness designation would close 86,020 acres including the WSA and adjacent area to motorized recreation. Currently, because of the lack of roads, ways and suitable washes ORV use is minimal. There is some minor usage along the WSA's southern boundary and occasional use of the ways in the vicinity of Fife Spring. The lower end of Cottonwood Canyon is entered occasionally by digging out under the railroad's bridge to cross under the tracks and drive up the wash using undamaged portions of an old way in combination with the wash. Entry under the tracks is frequently unavailable due to flood deposits. Approximately thirty-five visitor-days of motorized recreation use annually would be displaced from the WSA.

There are no cherrystem roads. Four miles of wash would be closed. Other than as mentioned, access to motorized vehicles is extremely limited so a closure is a minor consequence and public lands offering similar opportunities are readily available throughout the region.

Conclusion

Motorized recreational use of approximately thirty-five visitor-days annually would be displaced from the WSA. The impact of shifting this use to other public lands would be negligible.

Impacts on Production of Deer

The current full fire suppression policy would remain in effect unless modified in subsequent fire management plans. On the WSA's southeastern slopes, pinyon-juniper conversion to browse seeding on half of 13,440 acres would not be permitted. Consequently, an opportunity to increase deer numbers in the area by ten percent would be foregone.

Conclusion

Deer numbers may not be increased by ten percent through vegetation conversion and seeding with non-local species for browse.

Impacts on Water Quality

Protection from surface disturbance would occur on 86,020 acres of the Cottonwood Creek watershed. External to the WSA boundary, but within the area recommended as suitable are approximately 800 acres which are encumbered by mining claims. Exploration would cause approximately ten acres of surface disturbance. This could contribute to occasional temporary increases in turbidity and sediment load in Cottonwood Creek during heavy precipitation events. Since this system already has heavy sediment loads and is prone to flash flooding it is doubtful that the contribution from these ten acres would be readily identifiable.

Conclusion

Except for 3,330 acres external to the WSA's northeastern side, this alternative would recommend as suitable all of the Cottonwood Creek watershed. Designation would add an extra measure of protection to the watershed over that which currently exists and would constitute the most complete watershed protection of the alternatives being considered. The major effect on water quality would continue to be grazing by domestic livestock and wild horses.

MEADOW VALLEY RANGE WSA (NV-050-0156)

Proposed Action

(Partial Wilderness Alternative)

(Suitable: 97,180 acres, Nonsuitable: 88,564 acres)

The Proposed Action recommends the western, or higher half of the Meadow Valley Range WSA as suitable for wilderness designation, along with an easterly extension to encompass a portion of scenic Hackberry Canyon. This incorporates the Meadow Valley Mountains, which form the spine of the WSA and the upper portions of the bajadas which extend to the east of the main mountain ridge, in addition to Hackberry Canyon.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

A positive effect on naturalness would accrue in the main ridge area, where very rugged terrain and few human intrusions would provide outstanding naturalness for the long term. The only diminishments of complete naturalness are occasional vehicle tracks up washes on the west side to the base of the mountains and some ways crossing from Avertt Reservoir on the north to Hackberry Canyon. These would gradually rehabilitate with the protection given by wilderness designation. Remaining would be one mile of fence along the top of the ridge in the middle of the western part of the WSA, a small reservoir to the west of the fence, a corral, one big game guzzler and two small water developments in southerly canyons on the western side. Because of the topography and the limited nature of these projects, naturalness is affected only in the immediate vicinity. The total area affected is eighty non-contiguous acres. Project maintenance would have minimal impact on naturalness. Nearly all of the area recommended as suitable is totally devoid of evidence of man and major portions of it are seldom, if ever, even visited.

Naturalness (Nonsuitable Portion):

Range developments would continue to be maintained. The fence would be maintained by horseback and the corral and spring development at Hackberry Canyon would be maintained by vehicular access which would impair naturalness. Two reservoirs in Breedlove and one in Morrison-Wengert allotments would be constructed adjacent to the boundary of the area recommended as suitable. Their construction would result in three acres of surface disturbance and approximately eighteen miles of access opened up through a combination of clearing obstructions from washes and creating new ways. The result would be the use of three miles of existing way and the creation of three new miles of way in the Morrison-Wengert allotment and the clearing of six miles of wash and the creation of six new miles of way in the Breedlove allotment.

One big game guzzler would be built disturbing one-half acre. Its construction would not be subject to constraints under wilderness management. Access would be constructed by clearing obstructions from approximately nine miles of washes. Maintenance would be accomplished by vehicular access. This would cause loss of naturalness over the long term on one hundred acres. The major effect would be to open access to the central bajada which would result, over the long term, in a proliferation of ways and tracks. These would result, in turn, in occasional ORV penetration of the eastern portions of the area recommended as suitable and a substantial long-term loss of naturalness in the area from the divide south of Hackberry Canyon, to the southern WSA boundary. Naturalness is outstanding throughout this area and would be affected on most of 22,400 acres. Along the extreme southeastern boundary, exploration on mining claims would result in one to two miles of roads and six acres of disturbance. Naturalness, which ranges from outstanding to good, would be impaired for the long term on most of 7,700 acres. In Vigo Canyon drainage, the upper portions of which are relatively flat, access using the wash, bordering roads and old ways has resulted in a proliferation of ways which depreciate naturalness. This trend would continue on most of 17,300 acres.

Solitude (Suitable Portion):

Visitors would utilize the main ridge area, Hackberry Canyon and the western portion of the central bajada for outstanding solitude. In the Meadow Valley Mountains, vegetation is sparse and low-growing except for the northernmost part of the WSA. Topography is very rugged with cliffs, steep narrow canyons and rough outcrops. Slopes are very broken and drainages are close together. Hidden canyons abound and visitation is very rare. These factors would provide for outstanding solitude for the long term. To the east, rolling hills break into large open bajadas providing the solitude of spaciousness. Within Hackberry Canyon, the canyon walls provide a sense of enclosure. As a result, solitude is most readily obtainable through most of the area and would be easily preserved. Project maintenance would have an occasional, temporary impact on solitude in the vicinity of activity. Activities on the portion of the central bajada recommended as nonsuitable would affect solitude in the easterly, flatter portions of the areas recommended as suitable. A total of 15,400 acres would be affected intermittently.

Solitude (Nonsuitable Portion):

Fence, corral and spring maintenance would occasionally impair solitude in the vicinity of the projects. Guzzler maintenance would cause occasional impairment to solitude due to the presence of vehicles and other equipment. Opening access to the central bajada would result in a substantial long-term loss of solitude on 22,400 acres in the area from the divide south of Hackberry Canyon to the southern WSA boundary. Solitude ranges from outstanding to moderate in this area. Access to the central bajada would also permit access to the upper portions of this bajada which are within the area recommended as suitable. Because of the terrain, this would be difficult to control. On the WSA's southeast, operations on mining claims would cause intermittent long-term impairment of generally outstanding solitude on 7,700 acres. Similarly, ORV use in the upper Vigo Canyon drainage would impair solitude on 17,300 acres.

Primitive and Unconfined Recreation (Suitable Porion):

Designation would preserve outstanding primitive and unconfined recreation opportunities in the main ridge area, Sunflower Mountain and Hackberry Canyon. The Sunflower Mountain-Grapevine Spring area on the west side and Hackberry Canyon on the east would be the focal point in providing opportunities for challenging very scenic, dayhikes and backpacks. The entire mountain range provides good climbing and scrambling opportunities with the best being available on the western slopes of the Meadow Valley Mountains and in the large washes like Hackberry Canyon. The rugged topography, vast desert vistas, color tones ranging from very dark to sharply contrasting light buffs and lack of grazing in some areas provide excellent opportunities for photography and nature study. Potholes in ephemeral streams create intriguing temporary aquatic ecosystems. Bighorn sheep and archeologic features add interest and photographic subjects. Horseback riding is available but better in the gentler, more easterly sections.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Operations on mining claims on the southeastern side of the WSA, would impair primitive recreation opportunities there for the long term. The quality of recreation opportunities ranges from good to low. Motorized vehicle use in the area of the mining claims, on the central bajada and in the Vigo Canyon drainage would impair the opportunity to enjoy long wilderness hikes in relatively gentle terrain in a desert environment over the long term.

Special Features (Suitable Portion):

Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific as well as a scenic point of view. The range includes the westernmost exposure of Colorado Plateau redbeds. Although known cultural resource sites are few, it is likely that many may be found. The area is located between rich cultural expressions to the west and the sensitive Meadow Valley Wash. Botanical values may include two state protected plants **Arenaria stenomerees Eastwood** (Meadow Valley sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch)) found in the vicinity of the Meadow Valley Range. Golden eagles and prairie falcons may also pass through.

Special Features (Nonsuitable Portion):

Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific as well as a scenic point of view. The range includes the westernmost exposure of Colorado Plateau redbeds. Although known cultural resource sites are few, it is likely that many may be found. The area is located between rich cultural expressions to the west and the sensitive Meadow Valley Wash. Botanical values may include two state protected plants **Arenaria stenomerees Eastwood** (Meadow Valley sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch)) found in the vicinity of the Meadow Valley Range. Golden eagles and prairie falcons may also pass through. Desert tortoise inhabit the southern portion.

Conclusion

The 97,180 acres recommended as suitable would receive special legislative protection. Outstanding to good wilderness values of solitude, naturalness, supplemental values of geologic, zoologic and possible botanical interest, and primitive recreation would be preserved for the long term. Approximately 62,800 acres recommended as nonsuitable would lose wilderness values over the long term due to the increased vehicular access and consequent use.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 97,180 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. The 88,564 acres recommended as nonsuitable would remain available for entry under these laws. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Approximately eighty acres of claims on the WSA's central-western boundary, overlap the area recommended as suitable. Exploration or development of these claims is not anticipated due to the lack of favorable indicators for economic mineralization.

Moderate favorability for chemical/metallurgical grade limestone exists in both the suitable and nonsuitable areas but exploration and/or development are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources closer to population centers and rail lines.

In the extreme southeastern corner, a block of placer claims overlaps the WSA in an area recommended as nonsuitable. These claims are contiguous to a much larger area of claims extending south of the WSA. Exploration may occur on these claims but development is not anticipated due to a low favorability for metallic minerals throughout the WSA. Nonmetallic minerals favorability is also rated as low throughout. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known deposits, lack of past and present prospecting activities and general lack of mineralogical data.

Leasable Minerals

All lands within the 97,180 acres recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. The 88,564 acres recommended as nonsuitable would remain open under these laws. Exploration or development are not anticipated due to the general lack of interest exhibited in geophysical exploration and wildcat drilling by the petroleum industry and better potential for reserves in other regions.

Salable Minerals

Sand and gravel resources exist in the eastern area of the WSA but without substantial demand due to remoteness from markets. No permits would be issued in the suitable area.

Conclusion

The limited potential for marketable metallic, nonmetallic, leasable and salable minerals indicates little impact on mineral resource development in areas recommended as suitable. Little opportunity for development exists in the areas recommended as nonsuitable due to limited resource potential.

Impacts on Motorized Recreation Resources

Wilderness designation would close 97,780 acres of the Meadow Valley Range WSA to motorized recreation use, while leaving 88,564 acres on the eastern half open. The western half, which is recommended as suitable, is mostly steep, inaccessible terrain currently unavailable to vehicular use. There has been past usage for organized ORV events in Wildcat and Farrier washes which was suspended with WSA status. Periodic requests for permits in these washes have been received but rejected, and there is probably occasional individual or small group use of these. With designation approximately seven miles of usable length of Wildcat Wash would be closed off. Four miles of lower Farrier Wash, which comprises a portion of the boundary of the area recommended as suitable, would be closed. Occasional use in lower Hackberry Canyon would be closed off resulting in the loss of about one mile of access. Approximately two miles of ways would be closed off towards the northern boundary. Because of limited access and precipitous terrain, there is little current or past motorized vehicle use that would be displaced through wilderness designation and public lands offering similar opportunities are readily available throughout the region. An estimated seventy-five visitor-days (the current total use) annually of motorized recreation would be displaced.

In the area recommended as nonsuitable, the eastern half of the WSA, much of the terrain is gentler and more susceptible to motorized vehicle use. The southern two-thirds of this area is seldom used because access is very limited due to the bluffy edge along Meadow Valley Wash. Construction of range and wildlife projects would open up access to this area, increasing the current estimated annual 150 visitor-days, to 400 visitor-days in the foreseeable future. This would result in a proliferation of opportunities for motorized recreational use over much of the bajada area and into portions of the Bunker Hills. The lower end of Hackberry Canyon would be used and the Vigo Canyon drainage, with its many points of access and existing ways would have increased use.

Conclusion

Little motorized recreation use would be displaced since much of the area is inaccessible. The total change in motorized vehicle use would be an increase from the current estimated annual use of 225 visitor-days to a total of 375 visitor-days. This includes a shift of seventy-five visitor-days away from the area recommended as suitable.

Impacts on Grazing Facility Maintenance and Construction

In the area recommended as suitable, existing projects would continue to be maintained. Three reservoirs in the Meadow Valley Mountains would be reached by a combination of vehicle and walking and four and a half miles of fence would be accessed by horseback.

In the area recommended as nonsuitable two corrals and two spring developments would be reached, maintained and utilized by vehicle. A half-mile of fence would be maintained by foot. Two reservoirs in Breedlove and one in Morrison-Wengert allotments would be constructed without a need to meet wilderness value non-impairment standards.

Conclusion

There would be no effect on any existing or proposed projects and no impact on grazing within the WSA.

Adverse Impacts Which Cannot Be Avoided

The unavoidable adverse impact would be a loss of wilderness values on 62,800 acres due to a vocational mining exploration and project development for range and wildlife with associated ORV use of access routes.

Relationship Between Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

On the 97,180 acres designated as wilderness, wilderness values would be protected. On portions of the 88,564 acres not designated as wilderness, all present uses would continue. Project construction and maintenance, motorized recreational use and mining claim assessment work would substantially reduce wilderness values on 62,800 acres.

Irreversible and Irretrievable Commitments of Resources

On the 97,180 acres designated as wilderness, irreversible or irretrievable commitments of wilderness values are not expected. On the 88,564 acres not designated as wilderness, energy and mineral exploration, project construction and ORV use would create an irreversible and irretrievable commitment of physical wilderness resources on 47,500 acres.

All Wilderness Alternative

(Suitable: 185,744 acres, Nonsuitable: 0 acres)

The All Wilderness alternative recommends as suitable for wilderness designation the Meadow Valley Mountains, which form the spine of the WSA, all of scenic Hackberry and Vigo canyons, the Bunker Hills and all of the bajadas to the edge of Meadow Valley Wash.

Impacts on Wilderness Values

Naturalness:

A major positive effect on naturalness would accrue throughout the WSA except in the upper watershed of Vigo Canyon. Nearly all of the WSA is devoid of evidence of man and would be so maintained. In the main ridge area, very rugged terrain and few human intrusions provide for long-term, outstanding naturalness. The only diminishments of complete naturalness in the western half are occasional vehicle tracks up washes on the western side to the base of the mountains, up Farrier and Wildcat washes on the south, some ways crossing from Avertt Reservoir on the north to Hackberry Canyon, one mile of fence along the top of the ridge in the middle of the western part of the WSA, a small reservoir to the west of the fence, one small water development and trough and a guzzler in southerly canyons on the western side. Because of the topography and the limited nature of these projects, naturalness is affected only in the immediate vicinity. In the upper Vigo Canyon drainage, there is a corral and numerous ways crisscross the region. Two water developments and cattle handling facilities in Hackberry Canyon cause very localized effects on naturalness. Maintenance of these would have minimal effects on wilderness values. They would be maintained by reaching the fence by horseback and the corral and spring developments in Hackberry Canyon by vehicle. Except for those in the Upper Vigo Canyon drainage, most ways would gradually return to natural conditions. Six miles south of Hackberry Canyon, one-half mile of fence extends inward from near the WSA boundary and would be maintained by horseback. Some fifteen miles to the south of Hackberry Canyon, an exploratory oil well was drilled, resulting in a road which is cherrystemmed and a leveled area about one-half acre in extent at the drill site. Because it can be seen from surrounding elevations, this disturbance impacts naturalness on approximately one hundred acres surrounding the site. With designation, this site would be restored to natural conditions. In this region, naturalness, ranging from outstanding to low, would be retained. In the upper Vigo Canyon drainage, topography permits vehicular access from several points, making effectively maintaining a closure difficult. Continued vehicular intrusions could impact naturalness on 17,300 acres.

Two big game guzzlers would be built using non-impairing design, materials, access, construction methods and siting. Maintenance would be accomplished using non-impairing means.

Solitude:

Outstanding solitude would be preserved in this WSA. Significant portions of the WSA, particularly in the Meadow Valley Mountains, are seldom, if ever, visited. Outstanding solitude would prevail in the main ridge area for the long term. Most of the rest of the WSA would retain outstanding solitude over the long term due to its size and conformation. The only exception would be the upper Vigo Canyon drainage where access to ORVs from nearby roads and trails would be extremely difficult to control effectively. In this area, solitude could be intermittently impaired by intrusions by motorized vehicles.

In the Meadow Valley Mountains, vegetation is sparse except for the northernmost part of the WSA. Topography is very rugged with cliffs, steep narrow canyons and rough outcrops. As a result, solitude is readily obtainable throughout most of the area and would be retained for the long term. In the Bunker Hills, vegetation is low and topographic relief is less rugged, but solitude is none-the-less attainable. Vegetation on the bajadas is low and sparse, but the vast openness enables one to achieve solitude very readily. On the bajadas of the Vigo Canyon drainage, occasional vehicles would interfere with solitude, but the vastness and general lack of human presence contributes to an abiding solitude there, as well.

Primitive and Unconfined Recreation:

By precluding the development of access, primitive and unconfined recreation opportunities ranging from low to outstanding would be preserved for the long term in the short, steep canyons, sharp peaks and tortuous terrain in the main ridge area and in the vast and varied geography of the remainder of the WSA.

The Sunflower Mountain-Grapevine Spring area on the western side and Hackberry Canyon on the east would provide opportunities for challenging very scenic dayhikes and backpacks. Good overall climbing and scrambling opportunities are present, with the best being available in the Meadow Valley Mountains and the larger washes like Hackberry Canyon. The rugged topography, vast desert vistas and lack of grazing in some areas provide excellent opportunities for photography and nature study. Horseback riding is available but better in the gentler, more easterly sections. Numerous, challenging and good opportunities for all types of primitive recreation and the opportunity to experience an environment similar to that which early settlers found, would be retained.

Special Features:

Values present are geological, zoological and botanical. Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific as well as a scenic point of view. The range includes the westernmost exposure of Colorado Plateau redbeds. Although known cultural resource sites are few, it is likely that many may be found. The area is located between rich cultural expressions to the west and the sensitive Meadow Valley Wash. Botanical values may include two state protected plants **Arenaria stenomerees Eastwood** (Meadow Valley sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch)) found in the vicinity of the Meadow Valley Range. Golden eagles and prairie falcons may pass through. Desert tortoise occur in the southern end of the WSA. Designation would protect these values from surface disturbing activities.

Conclusion

The 185,744 acres would receive special legislative protection. A large area of expansive desert vistas with outstanding naturalness, great solitude and good to excellent opportunities for primitive and unconfined recreation would receive long-term protection. In the upper Vigo Canyon drainage there would be continued easy access for vehicles to 17,300 acres, which could reduce wilderness values there; but an enduring resource of wilderness would remain over most of the WSA.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the WSA would be withdrawn from all forms of entry under the mining laws. Unless a valid discovery exists at the time of designation, exploration or development would cease.

Approximately eighty acres of claims filed on the WSA's central-western boundary overlap the WSA. Development of these claims is not anticipated due to the lack of favorable indicators for economic mineralization. Since the bulk of these claims lie outside of the WSA, any exploration would likely occur external to the WSA. Moderate favorability for chemical/metallurgical grade limestone exists but exploration and/or development are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources closer to population centers and rail lines.

In the extreme southeastern corner of the WSA a block of placer claims overlap the WSA. These claims are contiguous to a much larger area of claims extending south of the WSA. Exploration may occur on these claims prior to designation but development is not anticipated due to a low favorability for metallic minerals throughout the WSA. Nonmetallic minerals favorability is also rated as low throughout. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known deposits, lack of past and present prospecting activities and general lack of mineralogical data.

Leasable Minerals

All lands within the 185,744 acres WSA would not be available for leasing under the mineral leasing laws if surface occupancy is required. Exploration or development are not anticipated due to the general lack of interest exhibited by the petroleum industry in geophysical exploration and wildcat drilling. Better potential for reserves exists in other regions.

Salable Minerals

Sand and gravel resources exist in the eastern areas of the WSA but without substantial demand due to remoteness from markets.

Conclusion

Due to the general lack of favorability for metallic and nonmetallic minerals and lack of markets for salable minerals, there would be little effect on mineral development. Similarly, available evidence, including a sealed exploratory well indicates prospects for liquid hydrocarbons is low. No impact to mineral exploration development is anticipated.

Impacts on Motorized Recreation Resources

Wilderness designation would close 185,744 acres of the WSA to motorized recreational. A five mile long cherrystem road would remain open although it is not accessible or passable. Four miles of way on the northern end of the WSA would be closed. Other tracks and vehicle trails which criss-cross the Vigo Canyon drainage would be closed. The mountainous western portion is inaccessible because of terrain, while much of the remainder has no developed access and thus remains unused. Some organized ORV events have used Farrier and Wildcat washes on the south prior to the WSA designation and some casual use probably still occurs. Organized event applications have been rejected since the area attained WSA status. Some use occurs in lower Hackberry Canyon, primarily by hunters. Considerable use is made of the Vigo Canyon drainage due to the flat terrain, bordering roads and ways and numerous tracks crossing the area. With designation, these uses would be excluded. Except for the Vigo Canyon drainage, most motorized use would be precluded. In this drainage, closure would be difficult to maintain and enforce due to lack of physical barriers and the presence of bordering roads and ways. A total of twenty-one miles of ways and washes would be closed. Motorized use would drop from the estimated current annual visits of 225 to 100 visitor-days. Similar motorized recreation opportunities are abundant in the region.

Conclusion

Two factors, steep terrain and undeveloped access, cause most of this WSA to be unused by ORVs. Exceptions are parts of some of the larger washes and the uplands of Vigo Canyon in the northeast of the WSA. Designation would affect motorized recreational use, dropping it from 225, down to 100 visitor-days annually.

Impact on Grazing Facility Maintenance and Construction

Existing projects which consist of short sections of fences, reservoirs, corrals and spring developments would continue to be maintained using various combinations of vehicle, horseback and foot access. Proposed projects consisting of two reservoirs in Breedlove Allotment and one in Morrison-Wengert Allotment would not be constructed. These projects were proposed in the Caliente Management Framework Plan as Priority 3 projects, meaning that they fall behind projects having existing allotment management plans (AMPs) (Priority 1) and behind those having unimplemented AMPs (Priority 2) in order of development. These projects would permit increases of sixty and seven hundred AUMs, respectively, in Breedlove and Morrison-Wengert allotments. Because their purpose appears to be primarily that of increasing AUMs, they have an apparent inconsistency with the Wilderness Management Policy and would not be permitted.

Conclusion

There would be no effect on any existing projects and no impact on grazing as currently practiced in the WSA. Three proposed reservoir projects would not be permitted as they would be used primarily to increase use.

No Wilderness Alternative

(Suitable: 0 acres Nonsuitable: 185,744 acres)

Impacts on Wilderness Values

Naturalness:

Natural features would assure preservation of wilderness values for the long term in substantial portions of the WSA. Very rugged terrain in the Meadow Valley Mountains would preclude nearly all intrusions and ORV use over most of the mountains. The only diminishments of complete naturalness in the western half are occasional vehicle tracks up washes on the western side to the base of the mountains, up Farrier and Wildcat washes on the south, some ways crossing from Avertt Reservoir on the north to Hackberry Canyon, one mile of fence along the top of the ridge in the middle of the western part of the WSA, a small reservoir to the west of the fence, one small water development and a guzzler in southerly canyons on the west side. Because of the topography and the limited nature of these projects, they affect naturalness only in the immediate vicinity. These projects would continue to be maintained as presently, by a combination of vehicle and/or walking or horseback. Outstanding naturalness would be preserved except for localized circumstances.

In the eastern half, in Hackberry Canyon, a corral and two water developments in the lower end would be reached, used, and maintained as presently, by vehicle. Occasional ORV penetration part way up the canyon would occur. A rugged scenic resource and outstanding naturalness would be retained in the upper reaches of the canyon. In the lower canyon, sufficient ORV entry would occur to impact naturalness there. In Morrison-Wengert Allotment, one reservoir would be built in a manner which would impair naturalness in the vicinity. Resulting would be three new miles of way. On the bajadas south of the divide from Hackberry Canyon, two livestock reservoirs would be built in Breedlove Allotment along with two big game guzzlers. Design, siting, materials, access and construction methods would not account for non-impairment of wilderness values. Each reservoir would disturb about two acres of surface and would affect naturalness on the surrounding one hundred acres. The guzzlers would disturb one-half acre each, result in visible tanks and collection aprons and affect naturalness on the surrounding one hundred acres. Most importantly, access of approximately eighteen and seventeen miles, respectively, would be opened up by these range and wildlife projects. This would occur through a combination of clearing obstructions from washes and creating new ways. All told, three miles of existing way would be used and three miles of new way created in Morrison-Wengert allotment, and six miles of wash cleared and six new miles of way created in Breedlove allotment. The major effect is the opening of access to the central bajada which would result, over the long term, in a proliferation of ways and tracks. These would result, in turn, in occasional ORV penetration of the eastern portions of the area recommended as suitable and a substantial long-term loss of naturalness in the area from the divide south of Hackberry Canyon, to the southern WSA boundary. Naturalness is outstanding throughout this area and would be affected on most of 25,900 acres. In Vigo Canyon drainage, the upper portions of which are relatively flat, access using the wash, bordering roads and old ways has resulted in a proliferation of ways which depreciate naturalness. This trend would continue on most of 17,300 acres. ORV use of the loop formed by crossing between Wildcat and Farrier Washes a few miles into the WSA would affect naturalness on 3,200 acres.

Along the extreme southeastern boundary, exploration on mining claims would result in one to two miles of roads and six acres of surface disturbance from backhoe trenches and drilling. Naturalness, which ranges from outstanding to good, would be impaired for the long term on most of 7,700 acres.

In nearly all of the area, the opening of access would result in the loss of naturalness except for the rugged portions of the Meadow Valley Mountains. There access by vehicle would remain limited to the lower western slopes and naturalness would remain intact in the higher areas.

Solitude:

The most important effect of this alternative is the opening of access to the large central bajada from the Meadow Valley Wash road. This would result in the occasional loss of solitude over the long term. Solitude would generally remain in the mountain portion because of the rugged terrain and the lack of any economic incentive to construct access.

Occasional loss of solitude would occur in the lower part of Hackberry Canyon and rarely, in the higher areas of the canyon, due to ORV use. In the upper watershed of Vigo Canyon, numerous ways would be used by ORVs causing loss of solitude. Occasional activities on mining claims in the southeastern corner of the WSA and on access that would be constructed there, would cause intermittent long-term loss of solitude. In total, solitude would be affected on 54,000 acres.

Primitive and Unconfined Recreation:

The Sunflower Mountain-Grapevine Spring area on the western side and Hackberry Canyon on the east provide opportunities for challenging very scenic dayhikes and backpacks. Good overall climbing and scrambling opportunities are present, with the best being available in the Meadow Valley Mountains and the larger washes like Hackberry Canyon. The rugged topography, vast desert vistas and lack of grazing in some areas provide excellent opportunities for photography and nature study. Horseback riding is available but better in the gentler, more easterly sections. This alternative would retain opportunities for these types of primitive recreation in the mountain portion, in upper Hackberry Canyon, in portions of the Bunker Hills, and, to an extent, in the bajada areas for horseback riding. In all, primitive and unconfined recreation opportunities would remain over the long term on 55,700 acres.

Special Features:

Values present are geological, zoological and botanical. Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific, as well as, a scenic point of view. The range includes the westernmost exposure of Colorado Plateau redbeds. Although known cultural resource sites are few, it is likely that many may be found. The area is located between rich cultural expressions to the west and the sensitive Meadow Valley Wash. Botanical values may include two state protected plants **Arenaria stenomerees Eastwood** (Meadow Valley sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch)) found in the vicinity of the Meadow Valley Range. Golden eagles and prairie falcons may pass through. Desert tortoise are present on the southern end of the WSA. This alternative would allow surface disturbing activities which could expose some of these geological features to clearer observation, but which would adversely affect their aesthetic impact. The state-protected plants, tortoise, raptors and cultural resources would not receive the added protection from surface disturbance that designation would provide.

Conclusion

Substantial wilderness values would remain in the Meadow Valley Mountains due to terrain. Hackberry Canyon would retain some wilderness values, while the Bunker Hills, the bajadas lying between the Hackberry Canyon divide and the southern WSA boundary and in the Vigo Canyon drainage would lose most of their naturalness and occasionally their solitude on 54,000 acres over the long term due to the opening and use of access. Primitive and unconfined recreation opportunities would be lost on 112,900 acres which include the 54,000 acres.

Impacts on Development of Mineral Resources

Locatable Minerals

The 185,744 acres recommended as nonsuitable would remain available for entry under the mining laws. Approximately eighty acres of claims filed on the WSA's central-western boundary, overlap the WSA. Exploration or development on these claims is not anticipated due to the lack of favorable indicators for economic mineralization. Since the bulk of these claims lie outside of the WSA, any exploration would likely occur external to the WSA to avoid its steeper terrain.

Moderate favorability for chemical/metallurgical grade limestone exists but exploration and/or development are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources closer to population centers and rail lines.

In the extreme southeastern corner a block of placer claims overlap the WSA. These claims are contiguous to a much larger area of claims extending south of the WSA. Exploration may occur on these claims but development is not anticipated due to a low favorability for metallic minerals throughout the WSA. Nonmetallic minerals favorability is also rated as low throughout. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known deposits, lack of past and present prospecting activities and general lack of mineralogical data.

Leasable Minerals

The 185,744 acres recommended as nonsuitable would remain open to leasing under the mineral leasing laws. Exploration or development are not anticipated due to the general lack of interest exhibited by the petroleum industry in geophysical exploration and wildcat drilling. Better potential for reserves exists in other regions.

Salable Minerals

Sand and gravel resources exist in the eastern areas of the WSA but without substantial market demand.

Conclusion

The limited potential for economic quantities of metallic, nonmetallic and leasable minerals leaves little opportunity for development in the WSA, even though it is recommended as nonsuitable. Due to a lack of markets, sand and gravel resources are not anticipated to be developed either.

Impacts on Motorized Recreation Resources

All 185,744 acres of the WSA would remain open to motorized recreational use. Rugged terrain in the Meadow Valley Mountains would continue to preclude nearly all motorized use. On the south, occasional organized ORV events would be permitted in Wildcat and Farrier washes with an interconnection between the two. Opening of access in conjunction with construction of range and wildlife projects would result in an increase in availability of lands on both the central bajada and in the area between Hackberry Canyon and Avertt Reservoir on the north. This would greatly increase opportunities for motorized recreational use in areas not currently available to such use. Current levels of use of the Vigo Canyon drainage would continue to increase, exploiting the ease of access from bordering roads and ways and the numerous existing trails and tracks.

Current annual motorized recreational use of 225 visitor-days would rise to 450 visitor-days.

Conclusion

Little change in motorized recreational use would occur in the mountainous regions due to terrain limitations. On the bajadas, increased access would open up large opportunities for motorized recreational use.

Impacts on Grazing Facility Management and Construction

Existing projects which consist of short sections of fences, reservoirs, corrals and spring developments would continue to be maintained. Proposed projects, which include three reservoirs, would be built.

Conclusion

No change would occur as far as existing projects and range resource utilization are concerned, because access would remain restricted due to physical factors. Three new projects could be constructed.

Resource Development Alternative

(Suitable: 17,165 acres, Nonsuitable: 168,579 acres)

The Resource Development alternative recommends all of Hackberry Canyon as suitable for wilderness designation, except for the uppermost two to three miles.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

Except for two spring developments and one corral at the lower end of Hackberry Canyon, there are no intrusions to depreciate naturalness which is outstanding. The corral and spring development may be maintained by vehicular access depending on specific circumstances. Topography in the canyon is rugged, providing excellent scenery and screening for the projects which are present.

Naturalness (Nonsuitable Portion):

Natural features would assure preservation of wilderness values for the long term in substantial portions of the WSA. Very rugged terrain in the Meadow Valley Mountains would preclude nearly all intrusions and ORV use over most of the mountains. The only diminishments of complete naturalness in the western half are occasional vehicle tracks up washes on the western side to the base of the mountains, up Farrier and Wildcat washes on the south, some ways crossing from Avertt Reservoir on the north to Hackberry Canyon, one mile of fence along the top of the ridge in the middle of the western part of the WSA, a small reservoir to the west of the fence, one small water development, and a guzzler in southerly canyons on the western side. Because of the topography and the limited nature of these projects, they affect naturalness only in the immediate vicinity. These projects would continue to be maintained as presently, by a combination of vehicle and/or walking or horseback. Outstanding naturalness would be preserved except for localized circumstances.

One reservoir would be built in Morrison-Wengert Allotment affecting naturalness in its vicinity. Approximately three miles of new way would be developed. On the bajadas south of the divide from Hackberry Canyon in Breedlove Allotment, two livestock reservoirs would be built along with two big game guzzlers. Design, siting, materials, access and construction methods would not account for non-impairment of wilderness values. Each reservoir would disturb about two acres of surface and would affect naturalness on the surrounding one hundred acres. The guzzlers would disturb one-half acre each, result in visible tanks and collection aprons and affect naturalness on the surrounding one hundred acres. Most importantly, access of approximately eighteen and seventeen miles, respectively, would be opened up by these range and wildlife projects. This would occur through a combination of clearing obstructions from washes and creating new ways. All told, three miles of existing way would be used and three miles of new way created in Morrison-Wengert allotment, and six miles of wash cleared and six new miles of way created in Breedlove allotment. Maintenance would be accomplished by vehicular access causing localized loss of naturalness. The major effect is the opening of access to the central bajada which would result, over the long term, in a proliferation of ways and tracks. This would result in a substantial long-term loss of naturalness in the area from the divide south of Hackberry Canyon, to the southern WSA boundary. Naturalness is outstanding throughout this area and would be affected on most of 25,900 acres. In Vigo Canyon drainage, the upper portions of which are relatively flat, access using the wash, bordering roads and old ways has resulted in a proliferation of ways which depreciate naturalness. This trend would continue on most of 17,300 acres. ORV use of a loop formed by crossing between Wildcat and Farrier Washes a few miles into the WSA would affect naturalness on 3,200 acres. Existing tracks in the Bunker Hills would become more permanent as use increases.

Along the extrême southeastern boundary, exploration on mining claims would result in one to two miles of roads and six acres of surface disturbance from backhoe trenches and drilling. Naturalness, which ranges from outstanding to good, would be impaired for the long term on most of 7,700 acres.

In nearly all of the area, the opening of access would result in the loss of naturalness except for the rugged portions of the Meadow Valley Mountains where access by vehicle would remain limited to the lower western slopes.

Solitude (Suitable Portion):

The rugged topography provides good cover and numerous opportunities for solitude. Opportunities for solitude within this portion of the WSA are outstanding.

Solitude (Nonsuitable Portion):

Project construction would cause temporary impairment of solitude during construction and maintenance. The most important effect of this alternative is the opening of access to the large central bajada from the Meadow Valley Wash road. This would result over the long term in a substantial loss of solitude in the area from the divide south of Hackberry Canyon to the southern WSA boundary. Solitude would generally remain in the mountain portion because of the rugged terrain and the lack of any economic incentive to construct access. In the upper watershed of the

Vigo Canyon drainage, access up the wash, from bordering roads and from old ways, has resulted in a proliferation of ways, which has depreciated solitude occasionally. This trend would continue to degrade solitude in the long term. Occasional activities on mining claims in the southeastern corner of the WSA and on access that would be constructed there, would cause intermittent long-term loss of solitude. In total, solitude would be affected on 54,000 acres.

Primitive and Unconfined Recreation (Suitable Portion):

The elimination of both possible mineral exploration and the use of ORVs in Hackberry Canyon would have a positive effect on primitive and unconfined recreation opportunities over the long term. Use would rise from the current estimated thirty-five to an estimated seventy-five visitor-days annually in the foreseeable future.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Operations on mining claims on the southeastern corner would impair primitive recreation opportunities there. The loss of primitive recreation values over the long term, ranging in quality from outstanding to good, would occur in much of the area. The exceptions would be in the Meadow Valley Mountains where terrain restrictions would maintain primitive and unconfined recreation opportunities intact over the long term; and in the Bunker Hills and remoter sections of bajadas where primitive recreation use consisting of dayhiking, backpacking, climbing, scrambling, nature study, photography and horseback riding would continue. In the areas more heavily used by motorized recreationists, primitive recreation would decline or terminate. In all, primitive and unconfined recreation opportunities would be remain on 43,000 acres over the long term.

Special Features (Suitable Portion):

Botanical values may include two state protected plants **Arenaria stenomerees Eastwood** (Meadow Valley sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch)) found in the vicinity of the Meadow Valley Range. The state-protected plants and cultural resources would receive the added protection from surface disturbance that designation would provide.

Special Features (Nonsuitable Portion):

Values present are geological, zoological and botanical. Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific, as well as, a scenic point of view. The range includes the westernmost exposure of Colorado Plateau redbeds. Although known cultural resource sites are few, it is likely that many may be found. The area is located between rich cultural expressions to the west and the sensitive Meadow Valley Wash. Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific as well as a scenic point of view. Desert tortoise occur in the southern end of the WSA. Botanical values may include two state protected plants found in the vicinity of the Meadow Valley Range. This alternative would allow surface disturbing activities which could expose some of these geological features to clearer observation, but which would adversely affect their esthetic impact. The state-protected plants and desert tortoise would not receive the added protection from surface disturbance that designation would provide.

Conclusion

The 17,165 acres would receive special legislative protection in a limited but highly scenic area, thus retaining wilderness values ranging from outstanding to excellent. Much of the area recommended as nonsuitable would lose its wilderness values of outstanding to good naturalness and solitude, and good primitive recreation opportunities over the long term due to the development of increased access and consequent use by motorized vehicles. Naturalness and solitude would be lost on the same 54,000 acres, while primitive and unconfined recreation opportunities would be lost on 125,700 acres, which include the 54,000 acre portions.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 17,165 acres recommended as suitable would be withdrawn from entry under the mining laws. The 168,570 acres recommended as nonsuitable would remain available for entry under these laws.

Approximately eighty acres of claim blocks filed on the WSA's central-western boundary overlap the area recommended as nonsuitable. Exploration or development on these claims is not anticipated due to the lack of favorable indicators for economic mineralization. Since the bulk of these claims lie outside of the WSA, any exploration would likely occur external to the WSA.

Moderate favorability for chemical/metallurgical grade limestone exists but exploration and/or development are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources closer to population centers and rail lines.

In the extreme southeastern corner of the WSA there is a block of placer claims which overlap the WSA in the area recommended as nonsuitable. These claims are contiguous to a much larger area of claims extending south of the WSA. Exploration may occur on these claims but development is not anticipated due to a low favorability for metallic minerals throughout the WSA. Nonmetallic minerals favorability is also rated as low throughout. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known deposits, lack of past and present prospecting activities and general lack of mineralogical data. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Leasable Minerals

All lands within the 17,165 acres recommended as suitable would be unavailable for leasing under the mineral leasing laws, if surface occupancy is required. The 168,570 acres recommended as nonsuitable would remain open under these laws. Designation would preclude any exploration methods which impair wilderness. Exploration or development are not anticipated due to the general lack of interest exhibited by the petroleum industry in geophysical exploration and wildcat drilling. One sealed exploratory hole was drilled. Better potential for reserves exists in other regions.

Salable Minerals

Sand and gravel resources exist in the eastern areas of the WSA but without substantial demand due to remoteness from markets.

Conclusion

The limited potential for economic quantities of metallic, nonmetallic and leasable minerals indicates that little development would be foregone in areas recommended as suitable. Similarly, little potential for development of these minerals remains available in the area recommended as nonsuitable. Due to a lack of markets, sand and gravel resources are essentially valueless, as well.

Impacts on Motorized Recreation Resources

Designation would close 17,165 acres of the Meadow Valley Range WSA to motorized recreational use while leaving 168,579 acres open. The area recommended as suitable centers on Hackberry Canyon. Presently, some minor motorized usage is made of the lower three miles of Hackberry Canyon, mostly by bird hunters. Designation would end this use by cutting off vehicular access to the springs. The other regions of the area recommended as suitable are, by and large, too precipitous to be used by motorized vehicles. Therefore, closure would have a minimal impact on usage.

Occasional organized ORV events would be permitted in Wildcat and Farrier washes with an interconnect between the two. Access to the central bajada and to more areas of the upper bajada in the Vigo Canyon drainage would be developed in the process of installing range and wildlife projects. This would greatly increase opportunities for motorized recreational use in areas not currently available to such use. Current levels of use of the Vigo Canyon drainage would continue to increase, exploiting the ease of access from bordering roads and ways and the existing numerous trails and tracks.

Motorized recreational use in the suitable area would fall from the current 50 visitor-days to 0, while increasing from the present 175 visitor-days to 400 visitor-days in the area recommended as nonsuitable.

Conclusion

Little change in motorized recreational use would occur in the mountainous regions due to terrain limitations. On the bajadas, increased access would open up large opportunities for motorized recreation.

Impacts on Grazing Facility Maintenance and Construction

The only project in the area recommended as suitable is a developed spring in the lower portion of Hackberry Canyon. Access and maintenance for this project would continue, using vehicles.

In the area recommended as nonsuitable existing projects would continue to be maintained, using various combinations of vehicle, horseback and foot access. There are no projects proposed in the area recommended as suitable. In the area recommended as nonsuitable, three reservoirs with access to them would be constructed.

Conclusion

Little to no effect would occur relative to use and maintenance of the spring development in the area recommended as suitable. In the area recommended as nonsuitable, new projects would be constructed with fewer design and siting requirements than in designated wilderness and with greater ease of access.

Wilderness Accent Alternative

(Suitable: 166,500 acres, Nonsuitable: 19,244 acres)

The Wilderness Accent alternative recommends as suitable for wilderness designation, all of the Meadow Valley Range WSA except for its northeastern corner. This corner, which is the Vigo Canyon drainage, has lower wilderness values, for the most part, and is difficult to secure against vehicle intrusions. The remainder of the area recommended as suitable includes the Meadow Valley Mountains, which form the spine of the WSA, all of scenic Hackberry Canyon, the Bunker Hills and all of the southern bajadas.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

A positive effect on naturalness would accrue throughout the area recommended as suitable. In the main ridge area, very rugged terrain and few human intrusions would provide outstanding naturalness for the long term. The only diminishments of complete naturalness in the western half of the WSA are occasional vehicle tracks up the washes on the western side to the base of the mountains, up Farrier and Wildcat washes on the south, some ways crossing from Avertt Reservoir on the north to Hackberry Canyon, and one mile of fence along the top of the ridge in the middle of the western part of the WSA, a small reservoir to the west of the fence, one small water development and a guzzler in southerly canyons on the western side. With designation, the ways would be rehabilitated and would eventually be indistinguishable. Because of the topography and the limited nature of the projects, naturalness is only affected in the immediate vicinity. Maintenance of these projects would have minimal impact on wilderness values. With these exceptions, nearly all of the area recommended as suitable is totally devoid of evidence of man.

Two big game guzzlers would be built using non-impairing design, materials, methods and siting. Access would be obtained using non-impairing means. Maintenance would be accomplished using non-motorized means.

Range developments would be maintained with the fence reached by horseback. The corral and spring developments in Hackberry Canyon may be maintained by vehicular access depending on specific circumstances. If permitted, these occasional operations using motor vehicles would result in intermittent, and short-lived impairment of naturalness.

The area's outstanding naturalness would be preserved for the long term in this alternative.

Naturalness (Nonsuitable Portion):

Naturalness is affected by numerous ways which cross upper Vigo Canyon drainage from bordering roads and from the canyon itself. Naturalness in this area is disturbed and would continue to be affected in greater amounts by ORV use, eventually involving 15,000 acres.

Solitude (Suitable Portion):

Significant portions of this area are seldom, if ever, visited. In the Meadow Valley Mountains, vegetation is sparse, providing little cover, except for the northernmost part of the WSA. However, topography is very rugged with cliffs, steep narrow canyons and rough outcrops. As a result, solitude is readily obtainable through most of the area.

In the Bunker Hills, vegetation is low and topographic relief is more limited, but solitude is none-the-less attainable. Vegetation on the bajadas is everywhere low and sparse, but the vast openness enables one to achieve great solitude very readily. If permitted, periodic use of motorized vehicles in conjunction with cattle gathering and management would create an occasional, short-term loss of solitude in lower Hackberry Canyon.

Solitude (Nonsuitable Portion):

The upper Vigo Canyon drainage and associated areas offer conditions in which occasional vehicles can interfere with solitude, but the vastness and general lack of human presence also contributes to an abiding solitude there, as well. With the passage of time, greater ORV use would cause increasing intrusions on solitude and it would eventually be lost there.

Primitive and Unconfined Recreation (Suitable Portion):

With designation, the Meadow Valley Mountains, Bunker Hills, Hackberry Canyon and central bajada would be the focal points for primitive recreation use. In the main ridge area, very rugged terrain and few human intrusions would provide outstanding primitive and unconfined recreation for the long term. Sunflower Mountain-Grapevine Spring area on the western side and Hackberry Canyon on the east provide opportunities for challenging, very scenic dayhikes and backpacks. Good overall climbing and scrambling opportunities are present with the best being available in the Meadow Valley Mountains and the larger washes like Hackberry Canyon. The rugged topography and vast desert vistas in some areas provide excellent opportunities for photography and nature study. Horseback riding is available but better in the gentler, more easterly sections. This alternative would retain numerous challenging and good opportunities for all these types of primitive recreation and the opportunity to experience an environment similar to that which early settlers found.

Primitive and Unconfined Recreation (Nonsuitable Portion):

With the exception of lower Vigo Canyon which is more incised, this area offers low value primitive recreation opportunities. In the lower end, there are vertical canyon walls which provide scrambling, photographic opportunities, short dayhikes, and horseback riding in the bottom. These opportunities would decline as motorized use rises.

Special Features (Suitable Portion):

Values present are geological, zoological and botanical. Geological values include rocks from every geologic period except the Precambrian, Jurassic and Cretaceous. Complex folding and thrust faulting provide an interesting aspect from a scientific, as well as, a scenic point of view. The range includes the westernmost exposure of Colorado Plateau redbeds. Although known cultural resource sites are few, it is likely that many may be found. The area is located between rich cultural expressions to the west and the sensitive Meadow Valley Wash. Botanical values may include two state protected plants **Arenaria stenomerees Eastwood** (Meadow Valley sandwort) and **Astragalus nyensis Barneby** (Nye milkvetch)) found in the vicinity of the Meadow Valley Range. Golden eagles and prairie falcons may pass through the area. Desert tortoise are present on the southern end of the WSA. This alternative would preclude surface disturbance which would provide an enhanced level of protection for cultural resources, the aesthetic aspects of the geological features and for the state-protected plants which are possibly present.

Special Features (Nonsuitable Portion):

State-protected plants and cultural resources, which may be present, would not receive the added protection from surface disturbance that designation would provide.

Conclusion

The 166,500 acres recommended as suitable would receive special legislative protection, thus retaining a large area of naturalness, good to outstanding solitude and primitive and unconfined recreation opportunities for the long term. Included are expansive desert vistas. The area recommended as nonsuitable would lose its remaining wilderness values over much of its acreage in the long term due to ease of access by vehicles.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 166,500 acres recommended as suitable would be withdrawn from entry under the mining laws. The 19,244 acres recommended as nonsuitable would remain available for entry under these laws. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of discovery.

Approximately eighty acres of claim blocks filed on the WSA's central western boundary overlap the area recommended as suitable. Exploration or development on these claims is not anticipated due to the lack of favorable indicators for economic mineralization. Since the bulk of these claims lie outside of the WSA, any exploration would likely occur external to the WSA.

Moderate favorability for chemical/metallurgical grade limestone exists, but exploration and/or development are not expected due to the rough terrain, distance to market and availability of exploitable limestone resources closer to population centers and rail lines.

In the extreme southeastern corner of the WSA a block of placer claims overlap the WSA in an area recommended as suitable. These claims are contiguous to a much larger area of claims extending south of the WSA. Exploration may occur on these claims prior to designation but development is not anticipated due to a low favorability for metallic minerals throughout the WSA. Nonmetallic minerals favorability is also rated as low throughout. Little impact on the availability of both metallic and nonmetallic minerals is foreseen due to the general lack of known deposits, lack of past and present prospecting activities and a general lack of mineralogical data.

Leasable Minerals

All lands within the 166,502 acres recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. The 19,244 acres recommended as nonsuitable would remain open under these laws. Exploration or development are not anticipated due to the general lack of interest exhibited by the petroleum industry in geophysical exploration and wildcat drilling. One presently sealed exploratory well was drilled. Better potential for reserves exists in other regions.

Salable Minerals

Sand and gravel resources exist in the eastern areas of the WSA but without substantial demand due to remoteness from markets.

Conclusion

The limited potential for economic quantities of metallic, nonmetallic and leasable minerals indicates that little development would be foregone in areas recommended as suitable. Conversely, little potential for development remains available in the areas recommended as nonsuitable. Due to a lack of markets, sand and gravel resources are essentially valueless, as well.

Impacts on Motorized Recreation Resources

Wilderness designation would close 166,500 acres to motorized recreation, while leaving 19,144 acres open. A five mile long cherrystem road would remain open although it is not accessible or passable. Two miles of way on the north would close. The mountainous western portion is inaccessible because of terrain limitations. Much of the remainder has no developed access and remains unused. Some organized ORV events have used Farrier and Wildcat washes on the south prior to the WSA designation and occasional casual use probably still occurs. Organized event applications have been rejected since the area attained WSA status. Some use occurs in lower Hackberry Canyon. Much use is made of the Vigo Canyon drainage due to flat terrain, bordering roads and ways and numerous tracks crossing the area. With designation, use by motor vehicles of all these areas except for the Vigo Canyon region, would be restricted. Motorized use in the upper Vigo Canyon watershed and in the canyon itself, would continue to grow. Designation would have little effect on motorized recreation overall, as use of the area recommended as suitable is currently light due to lack of access. In the area recommended as suitable, motorized recreational use would fall from the current annual estimated use of fifty visitor-days to zero in the foreseeable future. In the area recommended as nonsuitable, motorized recreational use would rise from the current estimated annual 175 visitor-days to 300 visitor-days.

Conclusion

Two factors, steep terrain and undeveloped access, cause most of this WSA to be unused. The exceptions are portions of some of the larger washes and the Vigo Canyon drainage in the northeastern part of the unit. The designated area under this alternative, excludes the Vigo Canyon drainage and would preclude access on areas which are currently poorly accessible.

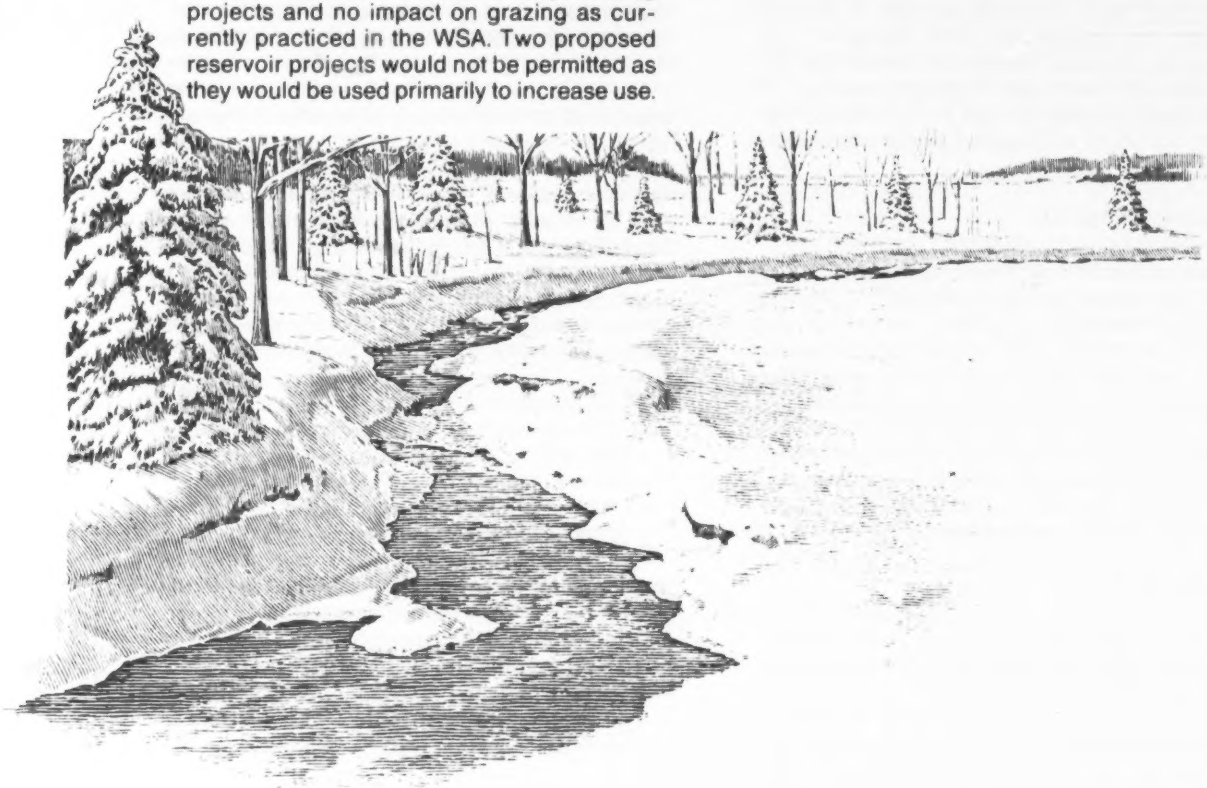
Impacts to motorized recreation use would be very limited.

Impacts on Grazing Facility Maintenance and Construction

Existing projects in the area recommended as nonsuitable, which consist of short sections of fences, reservoirs, corrals and spring developments, would continue to be maintained using various combinations of vehicle, horseback and foot access. Two proposed reservoirs in Breedlove Allotment in the area recommended as suitable would not be constructed. One proposed reservoir in the area recommended as nonsuitable in Morrison-Wengert Allotment would be constructed. These projects were proposed in the Caliente Management Framework Plan as Priority 3 projects, meaning that they fall behind projects having existing allotment management plans (AMPs) (Priority 1) and behind those having unimplemented AMPs (Priority 2) in order of development. These projects would permit increases of sixty and seven hundred AUMs, respectively, in Breedlove and Morrison-Wengert allotments. Because their purpose appears to be primarily that of increasing AUMs, the two in Breedlove Allotment have an apparent inconsistency with the Wilderness Management Policy and would not be permitted.

Conclusion

There would be no effect on any existing projects and no impact on grazing as currently practiced in the WSA. Two proposed reservoir projects would not be permitted as they would be used primarily to increase use.



MORMON MOUNTAINS WSA (NV-050-0161)

Proposed Action

(Partial Wilderness Alternative)

(Suitable: 123,130 acres, Nonsuitable: 39,757 acres)

The Proposed Action recommends the subcircular mountain mass of the Mormon Mountains as suitable for wilderness designation. This includes bajadas stretching from the flood plain of Meadow Valley Wash to the spiny limestone crags of Mormon Peak, to the bajadas spilling into the Tule Desert to the east. Recommended as nonsuitable for wilderness designation are the southwestern bajada and the lower edges of bajadas along the east.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

The central portion of the area recommended as suitable for wilderness designation is completely natural except for three big game guzzlers on the northern side and some minor fencing on the east. Due to design and siting and lack of vegetative screening, these guzzlers affect a fairly wide area. Four water catchments would be built. Design, siting, materials and construction methods would conserve naturalness. No other projects are proposed which would, in any way, affect naturalness.

In the area surrounding the central portion, naturalness is intruded by ways and cherrystem roads which penetrate toward the center of the WSA about every four to seven miles around the rim. Old range projects and old mining activities have intruded other areas. Existing projects consist of twenty-one small game guzzlers, fences, one corral, four spring developments, two miles of pipelines, and four troughs. Many of these intrusions are located in deep canyons and that, in conjunction with the fact that a user cannot traverse enough of the area at one time to notice the imprints, substantially ameliorates their effect and the area appears mostly natural.

In the area surrounding the central portion, one water catchment, eight big game guzzlers and several gap fences would be built using non-impairment standards. Three spring redevelopments, including pipelines and associated water storage facilities would be installed. Some local impairment of naturalness would occur, affecting about twenty acres. On the southeastern side, a well may be installed. Use of non-impairment standards would reduce the effect on naturalness to the localized area. The total direct effects on naturalness would involve approximately twenty-five acres.

Small game guzzlers would be maintained using non-motorized access in the inner portions of the area recommended as suitable Twelve of the existing small game guzzlers would continue to be maintained by a combination of driving and walking. All are located either close to the boundary of this alternative or to cherrystemmed roads.

Existing and proposed wildlife and livestock projects totaling 11 big game guzzlers, 5 catchments, 23 small game guzzlers, 4 spring developments (3 of which would be redeveloped), 1 well, and 1 corral would impair wilderness on 2,200 acres. There are seventeen miles of cherrystem roads within the area recommended as suitable and nine miles which border it. These affect naturalness on 1,600 acres. The closure of 24 miles of ways would improve naturalness on 1,800 acres. Naturalness would be affected on a total of 3,800 acres.

Naturalness (Nonsuitable Portion):

Numerous routes of access and relative proximity to Interstate 15 make this WSA an easily reached destination for both primitive recreationists and motorized users. Around the edges of the WSA, because of ease of access from peripheral roads, penetrating ways, and relatively flat valleys, ORV use has created some tracks and ways on the southwestern, southern, and southeastern areas and would continue to create new ways along the eastern and northeastern sides in the areas recommended as nonsuitable. These and other activities which are likely to occur would depreciate naturalness over the long term. In the southwest, some of the large blocks of mining claims would see some exploration activity, resulting in the construction of four miles of new roads and approximately fifteen acres of surface disturbance. This would result in impairment of naturalness on five hundred acres. ORV use of the bajada would affect naturalness over most of 14,700 acres of the southwestern portion.

On the eastern and western sides geophysical exploration would disturb a total of ten acres and two exploratory wells a total of twenty acres, plus result in three-fourths mile of new roads. These activities would impair naturalness in the vicinity of the activity. ORV use here would also affect naturalness over approximately 10,200 acres. Because of proximity to the Meadow Valley Wash road and to the railroad, one sand

and gravel permit would be issued, disturbing less than ten acres. Two small game guzzlers and one small exclosure would be maintained by vehicular access.

Solitude (Suitable Portion):

Solitude is readily obtainable because of higher vegetation above 5,000 feet and outstanding topographic features. High cliffs, rugged peaks, deeply cut canyons, washes and draws characterize most of the area recommended as suitable. Around the rugged central portion, lying like a doughnut, is terrain ranging from very mountainous through foothills to gentle bajadas. Therefore topographic screening ranges from excellent to moderate. Vast acreages lend to a sense of solitude even on open bajadas. Activities associated with project maintenance and construction would cause occasional localized, temporary loss of solitude in the vicinity of the activity. Because of heavy visitation in limited portions of the area, solitude would be slightly depreciated during high use times of the year.

Solitude (Nonsuitable Portion):

Along the eastern side in the areas extending from the foothills to the boundary on the lower bajada slopes, occasional vehicle passage on roads bounding the WSA would cause a temporary loss of solitude due to the great distances that they can be seen. A large increase in visitation would result in a loss of solitude in the more heavily traveled routes during high use times of the year. On the lower elevations, low vegetation, wide open, low relief bajada country creates solitude due to the vast openness of the area, but it is easily intruded by distant vehicles. Geophysical exploration and exploratory well drilling would cause occasional, temporary loss of solitude in areas adjacent to the activities. Because primitive recreation opportunities are limited on the bajadas, the effect of intrusive activities would be limited as visitation would be light.

Primitive and Unconfined Recreation (Suitable Portion):

Numerous dayhikes are possible commencing from trailheads at the ends of various ways and cherrystem roads and from peripheral roads. These hikes can be used to explore side canyons, rock-shelters and caves, to cross the range from side to side or to attain the summit. Starting points and destinations could be Hackberry and Davies springs, other routes would go up Toquop Wash from the east or remote, enclosed Henrie Canyon on the northwest. The large majority of the area offers challenging and scenic hiking opportunities. Backpacking in cooler parts of the year is a very favorable experience in a spectacular environment. The central area is prime for climbing and scrambling. Several peaks are available and cliffs of five hundred to one thousand feet are present. Mormon Mountain Peak and various associated ridges and peaks are extremely rugged and photogenic.

Motor vehicle use on cherrystem roads would depreciate hiking enjoyment along these routes and cause hikers to leave these for cross-country hikes. Because much of the area is very rugged, these forays would be challenging. In the spectacular, rugged Moapa Peak area, climbing and scrambling would remain popular. Other less attractive opportunities exist in the remainder of the area. Nature study and photographic opportunities are good to excellent with interesting plant communities, bighorn sheep, vast desert vistas and extremely rugged peaks.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Primitive and unconfined recreation values are generally lower in the flatter areas recommended as nonsuitable. Motor vehicle use on cherrystem roads and on new roads and ways which would be constructed would depreciate hiking enjoyment along these routes Opportunities to hike, photograph and observe interesting plant communities would persist in some of this area, but would be depreciated over much of the area over the long term.

Special Features (Suitable Portion):

Special features include botanical, geological, zoological and speleological values. A relict ponderosa pine stand near the summit and bighorn sheep offer splendid nature study and photographic opportunities. Geological interests include the oldest rocks in the Caliente Planning Unit, collectable mineral specimens and several thrust plates. The geological features would not be affected in any substantial way by designation or non-designation. Fossils are abundant in some areas and the botanical communities are of considerable scientific interest. Designation would provide an additional level of protection for these features from a variety of surface disturbances. Botanical values may include endemic plant species. Prairie falcons (State-protected), northern spotted bats and golden eagles (Federally protected) occur in, may pass through, or may be present (bat) in the WSA.
Desert tortoise occur in the southeastern area of the WSA. Wilderness designation would provide greater assurance that the habitat of these species would remain undisturbed. Some undisturbed or relatively undisturbed caves, one with

unique formations (ball stalactites), would be protected and would provide spelunking and scientific study opportunities. Numerous valuable archeological sites are present throughout the WSA and would receive increased protection from vehicle-borne vandals.

Special Features (Nonsuitable Portion):

Special features include geological, botanical, zoological and cultural items. Geological interests include collectable mineral specimens. The geological features would not be affected in any substantial way by designation or non-designation. Caves are present which would provide spelunking and scientific study opportunities but would more subject to vandalism. Botanical values include one possible state-listed plant Meadow Valley Range sandwort (**Arenaria stenomeres**)) that may be present within the WSA and the possible occurrence of endemic plant species. Prairie falcons (State-protected), northern spotted bat and golden eagles (Federally protected) occur in, may pass through, or may be present (bat) in the area. Non-designation would not provide the greater protection to the habitat of these species from surface disturbance that designation would and activities in this area may affect some habitat.

Archeological values present include a rock alignment, rock-shelter with art and two historic sites. These would provide enjoyment to the visitor over the short term, but would gradually lose their integrity as more access development and consequent increased motorized visitation brings vandalism.

Conclusion

This alternative best preserves the WSA's wilderness and primitive recreation values through incorporating the finest of these values in the area recommended as suitable, while recommending as nonsuitable, those areas having lower values and greater potential for conflict with competing resources such as mining exploration and motorized recreation.

The area recommended as suitable would preserve wilderness and primitive recreation values which are outstanding, making this area of spectacular peaks, deep canyons and large vertical cliffs the most visited of the five WSAs being studied in this document. Numerous routes of access and relative proximity to Interstate 15 make this WSA an easily reached destination for both primitive recreationists and motorized users.

In the area recommended as nonsuitable, wilderness and primitive recreation values ranging from moderate to good would be lost. Continued activities on the gentler portions would, over the long term, cause deterioration of naturalness, solitude and primitive recreation values over the southwestern and eastern portions. Mining mining exploration would affect the southwestern section of the WSA. Geophysical exploration would disturb ten acres and two exploratory wells would result in three-fourths mile of new road and twenty acres of surface disturbance. Since the southwestern area is low vegetation, open, low relief bajada country, wilderness values are somewhat limited. Consequently, disturbing activities would have a limited impact on deterioration of these values.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 123,130 acres recommended as suitable would be withdrawn from all forms of entry under the mining laws. The 39,757 acres recommended as nonsuitable would remain available for entry under these laws. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Two groups of mining claims lie within the area recommended as suitable. In the north-central area is a block of approximately fifty acres of claims. In the southeastern area are approximately five hundred acres of claims scattered in three locations. There is a block of approximately 9,800 acres of claims on the southwestern bajada in the area recommended as nonsuitable.

There are occurrences of chemical/metallurgical grade limestone. Portions of the WSA have moderate to high potential for the occurrence of locatable metallic minerals. Their presence in economic circumstances remains to be demonstrated, however. Exploration or development is not expected for limestone due to the rough terrain, distance to markets and availability of exploitable limestone resources closer to population centers and rail lines.

Some exploration activities would take place on mining claims on the southwestern bajada in the area recommended as nonsuitable. Due to a lack of present indication that precious metals exist either in economic quantities or concentrations, development is not anticipated. Because geochemical anomalies indicate exploration potential, designation constitutes an impact to exploration opportunities. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known economic deposits and all but hobby prospecting activity.

Leasable Minerals

Lands within the 123,130 acres recommended as suitable would be not be available for leasing under the mineral leasing laws if surface occupancy is required. The 39,757 acres recommended as nonsuitable would remain open under these laws. Regardless of wilderness status, exploration in the central portion of the area recommended as suitable would not be anticipated due to the precipitous terrain over much of its surface.

In the area recommended as nonsuitable, exploration is expected to occur on the southwestern third and in the central-eastern portion. Projected activities include geophysical data gathering and drilling two exploratory wells. Since the more accessible and more promising areas of the WSA remain open to leasing in this alternative, little effect on potential hydrocarbon availability is anticipated.

Salable Minerals

Sand and gravel are abundant, particularly along the outer edges of the WSA. Because of remoteness from markets, these deposits are largely valueless. Due to the close location of the Meadow Valley Wash road and the railroad, a limited market to service these facilities exists and it is anticipated that one pit would open along the southwestern fringe of the WSA as a result.

Conclusion

Limestone is unmarketable due to distance to markets and abundance of more accessible deposits. Other nonmetallic minerals are not thought to exist at economic concentrations and quantities. Portions of the WSA exhibit anomalous metallic mineral concentrations and thus designation would create impacts to further exploration ranging from not significant to significant. Oil and gas prospects are at a rank wildcat level in the WSA. The extremely limited market for sand and gravel resources would be partially met by the pit in the area recommended as nonsuitable. Oil and gas leasing, exploration and development can occur in the more accessible and more prospective areas of the WSA which are mostly recommended as nonsuitable. Remaining sand and gravel demand would be met by resources outside the WSA which are abundant and convenient in the region. The effect of this alternative on minerals development would be limited.

Impacts on Motorized Recreation Resources

Wilderness designation would close 123,130 acres of the WSA to motorized recreational use. Approximately thirty-five miles of cherrystem roads would remain open, but eighteen miles of ways would be closed. The southwestern bajada and lower portions of basins along the eastern side, all of which are easily accessible to motorized vehicles, would remain open. The southeastern basin, now used by motorized vehicles, would be closed. Because of cherrystem roads and two long ways which cross the southwestern bajada of the area recommended as nonsuitable, this alternative leaves much of the area and routes available to motorized vehicles open to continued use.

In the 123,130 acres recommended as suitable, designation would reduce the estimated current annual motorized recreational use of 180 visitor days, to 75 visitor-days.

In the 39,757 acres recommended as nonsuitable, motorized recreational use would rise from the current estimated annual use of 330 visitor-days, to 525 visitor-days in the foreseeable future.

Conclusion

The bulk of the area available to vehicles currently would remain available.

Impacts on Production of Bighorn Sheep

Bighorn sheep proponents consider the Mormon Mountains as an area of intensive, project oriented sheep management. Initial projects created some conflicts with wilderness values and consequently, habitat manipulation proponents perceived wilderness designation as an obstacle to projects and opposed wilderness status. Subsequent projects in other WSAs have proven that sensitivity to wilderness values in design, materials, siting and construction methods results in non-impairing, lower maintenance and more reliable wildlife projects.

In the area recommended as suitable, there are three big game guzzlers and numerous gap fences. One of the smaller big game guzzlers has operated with moderate reliability, while the other has failed to operate and was recently repaired. The larger big game guzzler has operated, but not at design levels. Achieving better operational performance and lessening its effect on naturalness in its vicinity may require project redesign. A scaled down, redesigned and slightly relocated version would meet both wildlife needs and wilderness requirements. The guzzlers and the fences would be maintained by foot or by horseback. Some, but not all, of these projects are presently reachable by vehicle. Maintenance or reconstruction of the big game guzzlers and the fences involves access by a combination motorized vehicle and horse or foot. Since wilderness designation would preclude access by motorized vehicle, this alternative would render maintenance and reconstruction more difficult.

There is a proposal to convert an area of approximately 4,600 acres in the upper part of the WSA to grass and forbs from the current brush and pinyon-juniper vegetation type. Approximately twenty-five percent of the type would be converted to form fingers and islands of trees and brush or grass. Because the terrain is rough, fire would be used, either as prescribed or as let-burn prescription wildfire. The result would be reintroduction of fire into the ecosystem where it has been excluded by fire control and a probable increase in bighorn sheep within four years of twenty-five percent above the low point reached several years ago when a die-off occurred.

In the area recommended as nonsuitable, two quail guzzlers would continue to be reached and maintained by a combination of driving and walking.

Conclusion

Wilderness designation may require changes with one big game guzzler and additional requirements in the reconstruction and maintenance of others. Installation of these projects would become more difficult. A vegetation management project may be compatible with the goal of reintroducing fire into the ecosystem and would increase bighorn sheep numbers as well. Bighorn sheep and quail habitat would receive greater protection from intrusions and from surface disturbing activities.

Impacts on Cultural Resources

There have been 260 cultural resource sites recorded in this WSA. This alternative incorporates 114 roasting pits, 17 lithic scatters, 20 rock-shelters with art, 14 historic sites and 8 rock features within the area recommended as suitable. All of these sites are considered as significant. A study commissioned by BLM (Chambers Consultants and Planners, 1983), recommended that all of the following site types be saved: 1) Caves or shelters with rock art, 2) Shelter/roasting pit complexes, 3) Segments of the early railroad bed and associated materials and 4) possibly, early structures in Carp. The report also recommended saving samples of: 1) Roasting pits, 2) Caves or shelters, 3) Artifact scatters and isolated artifacts including those of the post white contact period.

This alternative would preserve the majority of these site types from surface disturbing activities and from vandalism. Wilderness designation would close all existing ways in the area recommended as suitable, many of which provide access to numerous cultural resource sites. Cherrystem roads would remain open, but only one has numbers of sites in its vicinity. Even on cherrystem roads, increased wilderness-related patrol activity would elevate the level of protection above that which exists currently.

The area recommended as nonsuitable contains one rock alignment, one rock-shelter with art and two historic sites. Within the area recommended as suitable, but adjacent to the nonsuitable area are three roasting pits and a rock-shelter with art. Access to these would remain easy and vandalism may occur, although wilderness area patrol would offer additional protection to these sites as it would to three sites deeper in the area recommended as nonsuitable. Similarly, two rock-shelters located near the boundary, one inside the area recommended as suitable and one outside it, would receive additional protection through wilderness patrol.

Conclusion

This alternative maximizes protection to the numerous significant cultural resource sites present in the Mormon Mountains through protection from surface disturbing activities and through increased patrol activity which would reduce the potential for vandalism. Even for the four sites outside but close to the area recommended as suitable, wilderness patrol offers added protection from vandalism, though not from non-discretionary surface disturbing activities.

Adverse Impacts Which Cannot Be Avoided

The unavoidable adverse impact would be the loss of physical wilderness values due to a vocational mining exploration, one exploratory well drilled for hydrocarbons and ORV use on roads, ways, and off-road in the flatter areas. This would affect the bajadas on the WSA's northeastern, eastern and southwestern sides.

Relationship Between Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

On the 126,130 acres designated as wilderness, wilderness values would be totally protected. On portions of the 39,757 acres not designated as wilderness, all present uses along with new uses would continue. Motorized recreational use, energy exploration, mining claim assessment work and sand and gravel pit operations would substantially reduce wilderness values on 10,200 acres.

Irreversible and Irretrievable Commitments of Resources

On the 126,130 acres designated as wilderness, irreversible and irretrievable commitments of wilderness values are not expected. On the 39,757 acres not designated, mining exploration, sand and gravel operations and ORV use would create an irreversible and irretrievable commitment of physical wilderness resources.

All Wilderness Alternative

(Suitable: 162,887 acres, Nonsuitable: 0 acres)

The All Wilderness alternative recommends the sub-circular mountain mass of the Mormon Mountains as suitable for wilderness designation. This includes bajadas stretching from the flood plain of Meadow Valley Wash to the spiny limestone crags of Mormon Peak, across to the bajadas which spill into the Tule Desert on the east.

Impacts on Wilderness Values

Naturalness:

Although there are numerous intrusions scattered through the WSA, there is an overall quality of naturalness due to the area's vast size and physical characteristics. It is a domed, sub-circular mountain mass, intruded by frequent, deep canyons, surrounded by foothills, then bajadas. On the south, knife-like Moapa Peak rises from foothills and bajadas, forming an enclosed space from the WSA's south edge to the central peaks. Canyons radiate in all directions from the center, which is a massive jumble of craggy limestone peaks, cliffs of five hundred to one thousand feet, deep canyons and narrow to broad ridges. Intrusions which consist of ways, wildlife and range projects, and scattered old mines and mining exploration, lie in these canyons and are screened by topography. Combined with this fact, is the fact that the user cannot traverse enough of the area at one time to notice the imprints. This substantially ameliorates their effect and thus the area appears mostly natural. In this alternative, these values would be readily retained over most of the WSA.

Ways and cherrystem roads penetrate this WSA radially every four to seven miles, reaching within a few miles of the center. Near the north-central area are three big game guzzlers. These affect a fairly wide area due to their design, siting, construction and materials, and a lack of arboreal vegetation in the area. Twenty-three quail guzzlers affect only a limited area in their vicinity. Old range projects and old mining activities have intruded other areas. Newer projects consist of fences, a corral, four spring developments, five miles of pipelines and four troughs. Closure of twenty-six miles of ways, old project rehabilitation and repair of old prospecting sites would improve naturalness in the WSA.

Eight big game guzzlers, five water catchments and several more gap fences would be constructed using non-impairing means of access, design, siting, construction methods and materials. Naturalness would be affected on ten acres due to surface disturbance, and visually on about five hundred acres. Use of motorized equipment in accomplishing three spring redevelopments along with replacement of pipelines and water storage facilities would cause surface disturbance on about twenty acres and local impairment of naturalness. Most of the disturbance would be confined to existing ways, which would then be rehabilitated. However, consideration of wilderness preservation criteria in accomplishing these projects, would result in minimal effects. ORV use has created tracks and ways on the southwestern, southern and southeastern edges. Because of ease of access from peripheral roads, the relatively flat valleys would receive some occasional ORV incursions which would result in new tracks and ways along the southwestern, southern, southeastern, eastern, northeastern and northern sides. Wildlife and livestock water developments and 38 miles of cherrystem roads would affect naturalness over a total of approximately 4,700 acres.

Solitude:

Solitude would be temporarily affected during project construction and maintenance in the vicinity on several hundred acres. Use would become concentrated in the more popular portions of the area, thus affecting solitude in the busier periods of use on about 16,000 acres.

Primitive and Unconfined Recreation:

Primitive recreation opportunities abound and and would be benefited by the removal of vehicles from the lower portions of the WSA and the ending of mining exploration. These values would be temporarily affected by intermittent traffic on the cherrystem roads.

Special Features:

Special features include botanical, geological, zoological, speleological and cultural resource values. A relict ponderosa pine stand near the summit and bighorn sheep offer splendid nature study and photographic opportunities. Fossils are abundant in some areas and the botanical communities are of considerable scientific interest. Botanical values include one state-listed plant Meadow Valley Range sandwort (**Arenaria stenomeres**)) that may be present within the WSA and the possible occurrence of endemic plant species. Desert tortoises (State-listed rare), prairie falcons (State-protected), northern spotted bats and golden eagles (Federally protected) occur in, may pass through, or may be present (bat) in the WSA. Some undisturbed, or relatively undisturbed caves, one with unique formations (ball stalactites) would be protected and would provide spelunking and scientific study opportunities. Geological interests include the oldest rocks in the Caliente Planning Unit, collectable mineral specimens and several thrust plates.

Archeological values present include numerous roasting pits, pictographs, petroglyphs and rockshelters. These would provide enjoyment to the visitor. Designation would provide for the long-term integrity of these sites, as they would be protected from surface disturbing activities, and consequently, would not have to be salvaged in order to preserve their informational content.

Wilderness designation would provide greater assurance that the habitat of both plant and animal species would remain undisturbed and that those of the area's special features which are susceptible to surface disturbance, would remain protected under this alternative.

Conclusion

The area recommended as suitable would preserve wilderness and primitive recreation values ranging from good to outstanding. This area of spectacular peaks, deep canyons, rolling hills, sprawling bajadas, and large vertical cliffs is the most visited of the five WSAs being studied in this document. Numerous projects, ways and cherrystem roads intrude areas throughout the WSA but, due to the nature of the terrain, affect only limited local areas. A wide variety of special features would be preserved. Designation would cause the closing of ways, the rehabilitation of some old projects and the long-term availability of easily accessible, heavily visited, outstanding wilderness resources.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 162,887 acres recommended as suitable would be withdrawn from entry under the mining laws. In the north-central area is a block of approximately fifty acres of claims. In the southeast are approximately 500 acres of claims scattered over three locations and there is a block of approximately 9,800 acres of claims in the southwest. No exploration or development would occur except on claims having valid discoveries at the time of designation.

There are occurrences of chemical/metallurgical grade limestone. Portions of the WSA have moderate to high potential for the occurrence of locatable metallic minerals. Their presence in economic circumstances remains to be demonstrated, however. Exploration or development is not expected for limestone due to the rough terrain, distance to markets and availability of exploitable limestone resources closer to population centers and rail lines. Except for limestone, the entire WSA has low potential for the occurrence of all locatable nonmetallic minerals.

In the extreme southwestern corner, a block of placer claims overlaps the WSA. These claims are contiguous to a much larger area of claims extending south and west of the WSA. Exploration may occur on these claims prior to designation but development is not anticipated based on present data for the area. Minor exploration prior to designation is anticipated on some of the scattered claims in the southeast. Any exploration would be subject to strict non-impairment standards unless a valid discovery on the claim is demonstrated. Some exploration is anticipated on claims in the north-central area.

Because geochemical anomalies indicate exploration potential, designation would constitute an impact to exploration opportunities. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known economic deposits and all but hobby prospecting activity. Little impact on the development of both metallic and nonmetallic minerals is foreseen due to the general lack of known economic deposits.

Leasable Minerals

Lands within the 162,887 acres recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. Due to closure of the more accessible and promising areas of the WSA, a minor effect on potential oil and gas development is extant.

Salable Minerals

Sand and gravel resources are abundant, particularly along the outer edges of the WSA. Because of remoteness from markets, these deposits are largely valueless. However, the close location to the Meadow Valley Wash road and to the railroad, creates a limited market to service these facilities. Since the area recommended as suitable couldn't be used to supply this market, other pits from abundant nearby supplies would fill this need.

Conclusion

Limestone is unmarketable due to distance to markets and abundance of more accessible deposits. Other nonmetallic minerals are not thought to exist at economic concentrations and quantities. Portions of the WSA exhibit anomalous metallic mineral concentrations and thus designation would create impacts to further exploration ranging from not significant to significant. Oil and gas prospects are at a rank wildcat level in the WSA. The extremely limited market for sand and gravel resources would be met by pits outside, but near the WSA. The effect of this alternative on minerals development would be limited.

Impacts on Motorized Recreation Resources

Wilderness designation would close 167,887 acres of the Mormon Mountains WSA to motorized recreation. Approximately thirty-five miles of cherrystem roads would remain open, but twenty-six miles of ways would be closed. The southwestern bajada and basins in the south and east, now used by motorized vehicles, would be closed. Portions of 90,000 acres which, due to gentler terrain, are theoretically available to motorized vehicles, would be closed. Displaced ORV use would be readily accommodated on nearby public lands offering similar opportunities. Designation would change the estimated annual motorized recreational use from 510 visitor-days down to 300 visitor-days for the foreseeable future.

Conclusion

The remaining availability of cherrystem roads would somewhat reduce the impact to motorized recreation.

Impacts on Production of Bighorn Sheep

Bighorn sheep proponents consider the Mormon Mountains as an area of intensive, project oriented sheep management. Initial projects created some conflicts with wilderness values and consequently, habitat manipulation proponents perceived wilderness designation as an obstacle to projects and opposed wilderness status. Subsequent projects in other WSAs have proven that sensitivity to wilderness values in design, materials, access, siting and construction methods results in non-impairing, lower maintenance and more reliable wildlife projects.

Within the WSA, there are three big game guzzlers and numerous gap fences. One of the smaller big game guzzlers has operated with moderate reliability and would continue to be maintained with access obtained through horse or foot travel. Another has failed to operate and was recently repaired. The larger big game guzzler has operated, but not at design levels. Achieving better operational performance and lessening its effect on naturalness in its vicinity may require project redesign. A scaled down, redesigned and slightly relocated version would meet both wildlife needs and wilderness requirements. Some, but not all of these projects are presently reachable by vehicle. Maintenance or reconstruction of the big game guzzlers and the fences involves access by a combination of motorized vehicle and horse or foot. Since wilderness designation would preclude access by motorized vehicle, this alternative would render maintenance and construction more difficult to the extent that access becomes more difficult.

Proposed projects, including five water catchments, eight big game guzzlers and several gap fences, would be constructed, using non-impairing design, siting, construction methods and access. This would involve greater planning requirements and more difficulty in getting materials to some of the sites.

There is a proposal to convert an area of approximately 4,600 acres in the upper part of the WSA to grass and forbs from the current brush and pinyon-juniper vegetation type. Approximately twenty-five percent of the type would be converted to form fingers and islands of trees and brush or grass. Because the terrain is rough, fire would be used, either as prescribed or as let-burn prescribed wildfire. The result would be reintroduction of fire into the ecosystem where it has been excluded by fire control and a probable increase in bighorn sheep, within four years, of twenty-five percent above the low point reached several years ago when a die-off occurred.

Conclusion

Wilderness designation may require changes with one big game guzzler and additional requirements in the reconstruction and maintenance of others. Installation of these projects would become more difficult. A vegetation management project may be compatible with the goal of reintroducing fire into the ecosystem and would increase bighorn sheep numbers as well.

Impacts On Cultural Resources

There have been 260 cultural resource sites recorded in this WSA. Of these sites, the following are considered significant and are incorporated into the area recommended as suitable in this alternative: 114 roasting pits, 17 lithic scatters, 20 rock-shelters with art, 16 historic sites and 9 rock features within the area recommended as suitable. A study commissioned by BLM (Chambers Consultants and Planners, 1983), recommended that all of the following site types be saved: 1) Caves or shelters with rock art, 2) Shelter/roasting pit complexes, 3) Segments of the early railroad bed and associated materials and 4) possibly, early structures in Carp. The report also recommended saving samples of: 1) Roasting pits, 2) Caves or shelters, 3) Artifact scatters and isolated artifacts including those of the post white contact period. This alternative would preserve the majority of these site types from surface disturbing activities and from vandalism. Wilderness designation would close off twenty-six miles of existing ways, many of which provide access to numerous cultural resource sites. Cherrystem roads would remain open, but only one has a number of sites in its vicinity. Even on cherrystem roads, increased wilderness-related patrol activity would elevate the level of protection above that which exists currently.

Conclusion

This alternative provides maximum protection to 176 significant cultural resource sites. Because surface disturbance from mining, road construction and similar activities is strictly regulated and because the area would receive greater attention as a result of its wilderness status, vandalism would be greatly reduced. In addition, salvage, as a result of conflicts with projects and other activities such as mining exploration in the Whitmore, Hackberry and Iron Blossom areas, would not be required.

No Wilderness Alternative

(Suitable: 0 acres, Nonsuitable: 162,887 acres)

The No Wilderness alternative recommends none of the Mormon Mountains WSA as suitable for wilderness designation.

Impacts on Wilderness Values

Naturalness:

Although there are numerous intrusions scattered through the Mormon Mountains WSA, there is an overall quality of naturalness due to the area's vast size and physical characteristics. Physically, it is a domed, subcircular mountain mass, surrounded by foothills, then bajadas. On the south, knife-like Moapa Peak rises from foothills and bajadas, forming an enclosed space from the WSA's southern edge to the central peaks. Canyons radiate in all directions from the center, which is a massive jumble of craggy limestone peaks, cliffs of five hundred to one thousand feet, deep canyons and narrow to broad ridges. Most of the cherrystem roads and ways, and most of the projects lie in these canyons, and are therefore screened by topography. Combined with this fact, is the fact that users cannot traverse enough of the area at one time to notice the imprints.

The precipitous terrain and near lack of enticements for economic exploitation would keep the central portion of this WSA as wilderness over the long term except for Mormon Peak. It is anticipated that helicopter installed and serviced electronic facilities, primarily for the Air Force, would impact naturalness at the summit of Mormon Peak due to blasting and leveling, removal of vegetation and installation of antennas and other facilities. This would affect one hundred acres directly and eight thousand acres indirectly. In the north, motorized vehicle access to one big game guzzler, and to two other guzzlers nearby, would keep a seven mile road open, thus impacting naturalness along nearly the total length of the canyon. Seven acres would be directly affected, while some five hundred acres would be indirectly affected. Use of design, siting, access, construction methods, and materials without regard to wilderness values in installing eight new big game guzzlers, five catchments, gap fences, and in repairing existing ones would cause local impairment of naturalness, affecting 11 acres directly and 1,500 acres indirectly. Catchment construction would involve building two or three miles of road. Eight big game guzzlers would result in four miles of road construction and four acres of surface disturbance. The existing small game guzzlers would continue to be maintained by a combination of walking and driving and would continue to attract vehicle-borne hunters up various ways.

Maintenance of four spring developments and their associated pipelines and troughs, one corral, one-and-a-half miles of fence and a small enclosure would continue to affect naturalness in their immediate vicinity. Three of these springs are proposed for redevelopment which would result in a total surface disturbance of fifty acres. Mining exploration around Whitmore Mine would result in two miles of road construction and ten acres or less, of surface disturbance. Small mine development south of Whitmore would cause surface disturbance of fifteen acres. Assessment work on mining claims on the southwestern bajada would result in four miles of roads and fifteen acres of surface disturbance. ORV use would affect 17,900 acres on the southwestern and southern ends of the WSA. Exploration activities on scattered areas of the southeastern basin would result in three to four miles of new roads and less than two acres of surface disturbance. In an area within a few miles of the Iron Blossom Prospect and surrounding it, exploration would cause a surface disturbance of ten acres and construction of three miles of ways. On the eastern and western sides, geophysical exploration would disturb five acres each and two exploratory wells, ten acres each, plus result in three-fourths mile of new roads. Three sand and gravel pits would each result in ten acres of disturbance along the Meadow Valley Wash side of the WSA. These activities would impair naturalness directly on 140 acres and indirectly on 1,200 acres in the vicinity of the activities, and in some cases such as the weekend mining in the southeastern part, impair it over a much broader area.

In the north, in the area extending easterly from the long cherrystem road and north of the foothills around to the southeast, ORV use would create more ways and naturalness would be depreciated over the long term on 25,800 acres. Similarly, in the southeast, 8,600 acres would be affected. Small game guzzlers would continue to be maintained by vehicular access. Four water catchments would be constructed causing some local impairment of wilderness values.

Along the western side, vehicular access is extremely limited and even bajadas would retain wilderness values over most of their area. The exception would be approximately 2,600 acres along the cherrystem road leading into the western portion of the WSA. Small game guzzlers and the spring development at Davies Spring would be maintained as presently, by a combination of driving and walking.

Thirty-eight miles of cherrystem roads and twenty-six miles of ways, which would result from ORV use and livestock and wildlife water developments, would impair naturalness on 66,900 acres.

Solitude:

Although activities in the surrounding areas would intrude somewhat, substantial solitude would remain in the foreseeable future in many portions of the WSA's central region. In the lower regions, solitude would be affected when projected activities described in the "Naturalness" section are occurring. This would affect solitude over the long term on an intermittent basis on most of the same acreage as identified as being affected in the "Naturalness" analysis.

Primitive and Unconfined Recreation:

Numerous routes of access and relative proximity to Interstate 15 make this WSA an easily reached destination for both primitive recreationists and motorized users. Primitive recreation opportunities range from good to outstanding. Dayhikes could commence from trailheads at the ends of various ways and cherrystem roads. These hikes can be used to explore side canyons, rockshelters and caves, to cross the range from side to side or to attain the summit. Starting points or destinations could be Hackberry or Davies Springs. Other routes could go up Toquop Wash from the east or remote, enclosed Henrie Canyon on the northwest. Backpacking in cooler parts of the year would be a very favorable experience in a spectacular environment. The central area is prime for climbing and scrambling. Several peaks are available and cliffs of five hundred feet to one thousand feet are present. Mormon Mountain peak and various associated ridges and peaks are extremely rugged and photogenic. Motor vehicle use of existing travel routes, and new ones which would be constructed, would depreciate hiking enjoyment along these routes and cause hikers to leave them for cross-country hikes. Because much of the area is very rugged, these forays would be challenging. In the spectacular, rugged Moapa Peak area, climbing and scrambling would remain popular. Other, less attractive opportunities exist in the remainder of the area.

Other resource activities likely to occur in the outer two-thirds of the WSA would depreciate many of the preceding opportunities in the foreseeable future. Primitive recreation opportunities would remain intact in the two or three square miles of the Moapa Peak ridge and in the Mormon Mountain central area, but ways resulting from ORV use would proliferate around the base.

Special Features:

Special features include botanical, zoological, geological, speleological and archeological values. A relict ponderosa pine stand near the summit and bighorn sheep offer splendid nature study and photographic opportunities. The botanical communities are of considerable scientific interest. Botanical values include the possible occurrence of endemic plant species and a possible state-listed plant, the Meadow Valley Range sandwort (**Arenaria stenomeres**). Prairie falcons (State-protected), desert tortoises (State-listed rare), northern spotted bats and golden eagles (Federally protected) occur in, may pass through, or may be present (bat) in the WSA. Non-designation would not provide the greater protection to the habitat of both the plant and animal species from surface disturbance that designation would and activities in this area may affect some habitat. Geological interests include the oldest rocks in the Caliente Planning Unit, collectable mineral specimens and several thrust plates. Fossils are abundant in some areas. The geological features would not be affected in any substantial way by designation or non-designation except that fossil collection would be greater where a designation did not exist. Some undisturbed, or relatively undisturbed caves, one with unique formations (ball stalactites) would be at higher risk of vandalism due to greater ease of access.

Archeological values present include numerous roasting pits, pictographs, petroglyphs and rock-shelters. These would provide enjoyment to the visitor over the short term, but would gradually lose their integrity as more access development and consequent increased motorized visitation brings vandalism.

Conclusion

In the central portion of the WSA, rugged terrain would preserve outstanding wilderness values. Some depreciation would occur at Mormon Mountain peak with the construction of electronic sites. In the area surrounding the rugged central area, wilderness and primitive recreation values range from moderate to excellent. Numerous projects, ways and cherrystem roads are scattered around the WSA but due to the nature of the terrain, affect limited areas. Continued activities in the area over the long term, would cause deterioration of wilderness and primitive recreation values over the southwestern, southern, southeastern, eastern and northeastern portions. In the Moapa Peak area and on the western and northwestern sides, wilderness and primitive recreation values would persist over the long term. Encroachments from activities occurring in inner, but lower, portions of the WSA would depreciate wilderness values in peripheral areas and higher portions of the WSA. Wilderness values would be depreciated on approximately 66,900 acres of the WSA.

Impacts on Development of Mineral Resources

Locatable Minerals

All 162,887 acres would remain available for entry under the mining laws. There are no mining claims within the central area. In the north-central area is a block of approximately fifty acres of claims. In the southeast are approximately 500 acres of claims scattered over three locations and there is a block of approximately 9,800 acres of claims in the southwest.

Except for limestone, the entire Mormon Mountains WSA has low potential for the occurrence of all locatable nonmetallic minerals. There are occurrences of chemical/metallurgical grade limestone. Portions of the WSA have moderate to high potential for the occurrence of locatable metallic minerals. Their presence in economic circumstances remains to be demonstrated, however. Exploration or development are not expected for limestone due to the rough terrain, distance to markets and availability of exploitable limestone resources closer to population centers and rail lines.

Some exploration activities would take place on mining claims on the southwestern bajada. Due to a present lack of indications that precious metals exist either in economic quantities or concentrations, development is not anticipated. Exploration is anticipated in the vicinity of Whitmore Mine and to the south and on some of the scattered claims in the southeast. Some small mines may develop. Exploration is anticipated in the zone several miles wide surrounding the Iron Blossom Prospect in the north-central area.

Leasable Minerals

All 162,887 acres would remain available under the mineral leasing laws. Exploration in the central area is not anticipated due to the rough terrain over much of its surface.

In the lower areas, exploration is expected in the western third and in the central-eastern portion. Activities would include geophysical data gathering and drilling two exploratory wells. There would be no wilderness induced restrictions and thus little effect on potential hydrocarbon development.

Salable Minerals

Sand and gravel are abundant, particularly along the outer edges of the WSA. Because of remoteness from markets, these deposits are largely valueless. An exception is that deposits located close to the Meadow Valley Wash road and to the railroad, would service the limited market created by these facilities and three pits would open along the western fringe of the WSA as a result.

Conclusion

Limestone is unmarketable due to distance to markets and abundance of more accessible deposits. Other nonmetallic minerals are not thought to exist at economic concentrations and quantities. Portions of the WSA exhibit anomalous metallic mineral concentrations and thus further exploration would occur. Since mineralization in economic circumstances has not been demonstrated, it is presumed that small mines similar to the Whitmore and Iron Blossom Prospects may develop. Oil and gas prospects are at a rank wildcat level in the WSA. The extremely limited market for sand and gravel resources would be met by the three pits proposed. Oil and gas leasing, exploration and development can occur anywhere in the WSA but are likely to occur in the more accessible and more prospective areas of the WSA which are mostly in the lower elevations. There is no effect from this alternative on minerals exploration or development.

Impacts on Motorized Recreation Resources

All 162,887 acres of the Mormon Mountains WSA would remain open to motorized recreational use. Because of terrain restrictions, 90,000 acres or less would be available for motorized use. Twenty-six miles of ways and thirty-eight miles of cherrystem roads provide access to portions of the area. Many of these routes are in relatively enclosed, rough-bottomed canyons so that access off the actual running surface is limited. On the southwestern bajada and in some basins on the southeastern and eastern sides, terrain is gentle enough that they are currently used for motorized recreation. Motorized vehicle use would continue to grow from the estimated current annual visitor-days of 510 to 1,000 visitor-days.

Conclusion

The thirty-eight miles of cherrystem roads and twenty-six miles of ways would provide access to many very interesting places for motorized recreationists. Access off roads and ways is limited because of terrain steepness and roughness, except for portions of the southwestern, southern and through the eastern edges.

Impacts on Production of Bighorn Sheep

Bighorn sheep proponents consider the Mormon Mountains as an area of intensive, project oriented sheep management. Within the WSA, there are three big game guzzlers and numerous gap fences. One of the smaller big game guzzlers has operated with moderate reliability and would continue to be maintained with access obtained through horse or foot travel. Another has failed to operate and was recently repaired. The larger big game guzzler has operated, but not at design levels. Achieving better operational performance may require project redesign. A scaled down redesigned version would meet wildlife needs. Some, but not all of these projects are presently reachable by vehicle. Maintenance or reconstruction of the big game guzzlers and the fences involves access by a combination of motorized vehicle and horse or foot. There would be no access restrictions due to wilderness requirements.

Proposed projects, including five water catchments, eight big game guzzlers and several gap fences, would be constructed with no wilderness-imposed design, siting, construction methods and access restrictions.

There is a proposal to convert an area of approximately 4,600 acres in the upper part of the WSA to grass and forbs from the current brush and pinyon-juniper vegetation type. Approximately twenty-five percent of the type would be converted to form fingers and islands of trees and brush or grass. Because the terrain is rough, fire would be used, either as prescribed or as let-burn prescribed wildfire. The result would be a probable increase in bighorn sheep, within four years, of twenty-five percent above the low point reached several years ago when a die-off occurred.

Conclusion

Installation of wildlife projects would be less difficult due to lack of wilderness-related restrictions. A vegetation management project would increase bighorn sheep numbers.

Impacts on Cultural Resources

There have been 260 cultural resource sites recorded in the WSA. These include the following significant sites: 114 roasting pits, 17 lithic scatters, 20 rock-shelters with art, 16 historic sites and 9 rock features. A study commissioned by BLM (Chambers Consultants and Planners, 1983), recommended that all of the following site types be saved: 1) Caves or shelters with rock art, 2) Shelter/roasting pit complexes, 3) Segments of the early railroad bed and associated materials and 4) possibly, early structures in Carp. The report also recommended saving samples of: 1) Roasting pits, 2) Caves or shelters, 3) Artifact scatters and isolated artifacts including those of the post white contact period.

This alternative would not add the protection against surface disturbance that wilderness designation confers. The area and its sites would remain open to activities such as mining exploration, activities for which BLM has limited discretion to prevent surface disturbance and retain sites intact. Access through cherrystem roads, ways, and new access would continue to expose these sites to vandalism.

Conclusion

This alternative provides no additional protection for the large number of significant cultural resource sites present in the WSA. Mining exploration activities would lead to the loss or disturbance cultural sites in the Whitmore Mine and Iron Blossom Prospect areas and along the southeastern and southwestern boundaries. Vandalism and pot hunting would slowly take their toll over the long term.

Resource Development Alternative

(Partial Wilderness Alternative)

(Suitable: 23,690 acres, Nonsuitable: 138,927 acres)

The Resource Development Alternative recommends the very center of the mountain core as suitable for wilderness designation. Surrounding this are more mountains, deep canyons, foothills, and large bajadas.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

The area recommended as suitable for wilderness designation is completely natural except for three big game and two quail guzzlers on the northern side and some minor fencing on the east. These developments would continue to be maintained. Due to their design, siting, and lack of vegetative screening, two of these guzzlers affect a total of several hundred acres. Three other water catchments projected to be built would affect approximately fifty acres in the immediate vicinity of each. The remaining gap fences would be constructed and would affect naturalness only in their immediate vicinity.

Outstanding naturalness would be preserved in this 26,690 acre core region of the Mormon Mountains.

Naturalness (Nonsuitable Portion):

The area recommended as nonsuitable forms a doughnut around the mountainous central portion. This area includes terrain ranging from very mountainous, through foothills to gentle bajadas. In the area recommended as nonsuitable, naturalness is intruded by ways and cherrystem roads which penetrate towards the center of the WSA about every four to seven miles around the rim. Existing range and wildlife projects and old prospecting activities have affected other areas. These projects consist of three, one-half mile gap fences, one corral, four spring developments, a corral, approximately five miles of pipelines, four troughs, a small exclosure and twenty-one quail guzzlers. Many of these intrusions are located in deep canyons and that, in conjunction with the fact that a user cannot traverse enough of the area at one time to notice the imprints, substantially ameliorates their effect, making the area appear mostly natural. Around the edges of the WSA, ORV use has created tracks and ways in the southwestern, southern and southeastern portions. New ways would continue to develop from ORV use on flatter sections of the area recommended as nonsuitable. In the two to three square mile Moapa Peak area and on the western and northwestern sides, wilderness values would persist over the long term. However, due to gentle terrain and the proximity of roads and ways, new ways resulting from ORV use would proliferate leading to the base of Moapa Peak. In the southeast, the current tendency of drivers to leave roads and ways in the lower, gentler parts of the WSA would continue and ways would increase, particularly in the valleys leading to Hackberry Spring. Existing and new small and big game guzzlers would continue to attract vehicle-borne hunters up various ways. Because of ease of access from peripheral roads, penetrating ways and relatively flat valleys, ORV use would create new ways along the eastern and northeastern sides. Travel on these newly created ways and on existing ones would affect naturalness in their vicinity. Seven small game guzzlers and other projects would continue to be maintained by vehicle, which would temporarily affect naturalness in the vicinity, and by horseback or foot in the more inaccessible areas, which would not affect naturalness. In the northwestern quadrant there are six miles of way running from the boundary of the WSA to the boundary of the area recommended as suitable in this alternative. This way is used to access three big game guzzlers and would be kept open by vehicular travel and by minor maintenance. This would affect six acres directly and four hundred acres indirectly.

Projects that would be built include eight big game guzzlers, three spring redevelopments, two catchments and some gap fences. The big game guzzlers would result in four miles of road construction and four acres of surface disturbance. Design, siting, construction methods and materials would not be constrained by wilderness criteria and, therefore, some local impairment could occur. Encroachments from activities occurring in inner portions of the area recommended as nonsuitable would affect wilderness values both in the fringes and in the higher portions of the area recommended as suitable. Wilderness values would be affected on most of 43,800 acres of the are recommended as nonsuitable.

Spring redevelopments, along with replacement of pipelines and water storage facilities, would result in improvement of existing ways, surface disturbance of fifty acres and facilities which would not be designed, sited or constructed to achieve non-impairment of wilderness values. A total of fifty-four acres of surface disturbance would ensue and 4,100 acres of indirectly affected naturalness.

Mineral exploration around Whitmore Mine would result in two miles of road construction and ten acres of surface disturbance. Exploration to the south of Whitmore Mine would result in another fifteen acres of surface disturbance and small mines like Whitmore and the Iron Blossom Prospect. Exploration is anticipated in the zone several miles wide surrounding the Iron Blossom Prospect in the north-central area. Exploration in the southwest where there are large blocks of claims would produce four miles of roads and less than fifteen acres of surface disturbance. Occasional exploration in the southeast by weekend or a vocational miners would produce three or four miles of road and two acres of surface disturbance. This would affect a much larger area, however, because it would be spread out over the entire southeastern basin. Geophysical exploration would disturb ten acres, split equally between the eastern and western sides. Two exploratory wells, one in the central-eastern area and one in the western portion, would result in three-fourths mile of new road and ten acres of surface disturbance for each. These proposals and activities would be spread over much of the area recommended as nonsuitable, in a manner which would cause widespread influence on naturalness. The influence of terrain would moderate the effect somewhat, but limitedly, in the mountainous portion.

In the northern section of the WSA, in the area extending easterly from the long cherrystem road and north of the foothills, and then southerly along the eastern side of the WSA, ORV use would create more ways and naturalness would be depreciated over the long term. Eventually most of 22,400 acres would be affected. Small game guzzlers would continue to be maintained by vehicular access.

ORV use in the basin on the southeastern side would affect naturalness on most of 6,700 acres there.

Along the bajada of the southwestern side, mining claim exploration would cause surface disturbance on fifteen acres and result in four miles of roads. ORV use would affect up to 14,700 acres in this area.

Along the western side, vehicular access is extremely limited and even bajadas would retain wilderness values over most of their area. The exception would be approximately 2,600 acres along the cherrystem road leading into the western portion of the WSA. Due to convenience to the railroad and Meadow Valley Wash Road, three sand and gravel pits would be opened up along the western side of the WSA. These would disturb an area of less than thirty acres. Naturalness in their vicinity would be destroyed. Due to the activities and projects discussed, it is anticipated that naturalness would be impaired on 58,400 acres of the WSA. This acreage is scattered around the WSA's northern, eastern, southeastern and southwestern sides. Only the western and northwestern sides would remain natural over the long term.

Solitude (Suitable Portion):

Solitude is outstanding and readily obtainable because of more arboreal vegetation above 5,000 feet and outstanding topographic features. High cliffs, rugged peaks, deeply cut canyons and washes characterize most of the area recommended as suitable. Solitude would be preserved in the suitable area except where project maintenance was occurring and in the more popular portions of the WSA where an estimated thirty-eight percent increase in visitors would be concentrated. Since project maintenance would be infrequent, limited in duration, and designed to minimize effects on wilderness users, there would be little effect. Encounters with other recreationists on the major routes to the peaks and springs would somewhat depreciate solitude in the busier times of the year.

Solitude (Nonsuitable Portion):

Solitude ranges from outstanding in the deep canyons and rugged peaks to good on the open bajadas where screening is not adequate but vast openness provides solitude. Topographic screening thus ranges from excellent to moderate. Above 5,000 feet vegetation is more arboreal, creating good screening. Project construction and maintenance and mining and oil and gas exploration would disturb solitude temporarily in the localized area while the activities are taking place. This disturbance would be intermittent and occur over the long term. Due to the ease of access by motorized vehicle in many portions of the WSA, encounters with both hikers and drivers would be fairly frequent for users and this would affect solitude. Because of the open aspects of the bajadas, traversing vehicles can be seen for great distances which causes an impact on opportunities for solitude on most of the bajada area when a vehicle is present. Small game guzzlers and the spring development at Davies Spring would be maintained as presently, by a combination of driving and walking. This would result in occasional, temporary loss of solitude. With this alternative, solitude which is good on the bajadas and lower mountain slopes, would be largely lost due to the intermittent intrusions. In the mountain areas, solitude is outstanding and would be temporarily and occasionally disrupted, but would largely persist. A total of 63,000 acres would have depreciated solitude from activities which would occur intermittently thereon.

Primitive and Unconfined Recreation (Suitable Portion):

Designation would provide additional protection for the outstanding primitive recreation opportunities extant in this area. These include numerous challenging dayhikes, backpacking in cooler parts of the year, and climbing and scrambling.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Dayhikes could commence from trailheads at various ways and cherrystem roads and from peripheral roads. The large majority of the area offers challenging and scenic hiking opportunities. Motor vehicle use of existing travel routes, and newly constructed ones, would depreciate hiking enjoyment along these routes and cause hikers to leave the more heavily traveled ones for cross-country hikes. Because much of the area is very rugged, these forays would be challenging. In the spectacular, rugged Moapa Peak area, very challenging climbing and scrambling would remain popular. Other, less attractive opportunities exist in the remainder of the area and would persist to a degree. Nature study and photographic opportunities are good to excellent with interesting plant communities, bighorn sheep, vast desert vistas and extremely rugged peaks. Except for Moapa Peak and a few areas in the rugged inner section of the area recommended as nonsuitable, primitive recreation opportunities would suffer substantial deterioration over the long term due to increasing motorized use.

Special Features (Suitable Portion):

Special features include botanical, geological, zoological and speleological values. A relict ponderosa pine stand near the summit and bighorn sheep offer splendid nature study and photographic opportunities. Fossils are abundant in some areas and the botanical communities are of considerable scientific interest. Designation would provide an additional level of protection for these features from a variety of surface disturbances. Botanical values may include the possible occurrence of endemic plant species. Prairie falcons (State-protected), northern spotted bats and golden eagles (Federally protected) occur in, may pass through, or may be present (bat) in the WSA. Wilderness designation would provide greater assurance that the habitat of these species would remain undisturbed. Some undisturbed, or relatively undisturbed caves, one with unique formations (ball stalactites) would be protected and would provide spelunking and scientific study opportunities.

Special Features (Nonsuitable Portion):

Special features involve geological, botanical, zoological and cultural items. Geological interests include the oldest rocks in the Caliente Planning Unit, collectable mineral specimens and several thrust plates. The geological features would not be affected in any substantial way by designation or non-designation. Caves are present which would provide spelunking and scientific study opportunities. Botanical values include one possible state-listed plant (Meadow Valley Range sandwort (**Arenaria stenomeres**)) that may be present within the WSA and the possible occurrence of endemic plant species. Desert tortoises (State-listed rare), prairie falcons (State-protected), northern spotted bat and golden eagles (Federally protected) occur in, may pass through, or may be present (bat) in the WSA. Non-designation would not provide the greater protection to the habitat of these species from surface disturbance that designation would and activities in this area may affect some habitat.

Archeological values present include numerous roasting pits, pictographs, petroglyphs and rock-shelters. These would provide enjoyment to the visitor over the short term, but would gradually lose their integrity as more access development and consequent increased motorized visitation brings vandalism.

Conclusion

The area recommended as suitable would preserve wilderness and primitive recreation values which are outstanding. This area of spectacular peaks, deep canyons and large vertical cliffs is the most visited of the five WSAs being studied in this document.

In the area recommended as nonsuitable, wilderness and primitive recreation values ranging from good to excellent would be conserved over the long term in the more mountainous portion. Numerous existing projects, ways and cherrystem roads are scattered around the WSA but due to the nature of the terrain, affect only limited areas. Continued activities on the gentler portions of the area recommended as nonsuitable would, over the long term, cause deterioration of naturalness, solitude and primitive recreation values over the southwestern, southern, southeastern, eastern and northeastern portions. Numerous routes of access and relative proximity to Interstate 15 make this WSA an easily reached destination for both primitive recreationists and motorized users. Weekend or a vocational mining or mining exploration would affect the southerly areas of the WSA. Some mining exploration would affect the area surrounding the Iron Blossom Prospect in the WSA's north-central section. Geophysical exploration would disturb ten acres and two exploratory wells would result in three-fourths mile of new road and twenty acres of surface disturbance. Since the southern area is open, low vegetation, low relief bajada country, wilderness values are somewhat limited. Consequently, disturbing activities would have a limited impact on deterioration of these values.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 23,690 acres recommended as suitable would be withdrawn from entry under the mining laws. The 138,927 acres recommended as nonsuitable would remain available for entry under the mining laws. In the area designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

There are no mining claims within the area recommended as suitable. In the north-central area is a block of approximately fifty acres of claims. In the southeastern portion of the area recommended as nonsuitable are approximately 500 acres of claims scattered over three locations and there is a block of approximately 9,800 acres of claims in the southwest.

Except for limestone, the entire Mormon Mountains WSA has low potential for the occurrence of all locatable nonmetallic minerals. There are occurrences of chemical/metallurgical grade limestone. Portions of the WSA have moderate to high potential for the occurrence of locatable metallic minerals. Their presence in economic circumstances remains to be demonstrated, however. Exploration or development are not expected for limestone due to the rough terrain, distance to markets and availability of exploitable limestone resources closer to population centers and rail lines.

Some exploration activities would take place on mining claims on the southwestern bajada. Due to a present lack of indications that precious metals exist either in economic quantities or concentrations, development is not anticipated. Exploration is anticipated in the vicinity of Whitmore Mine and to the south and on some of the scattered claims in the southeast. Some small mines may develop. Exploration is anticipated in the zone several miles wide to the north of the boundary of the area recommended as suitable and surrounding the Iron Blossom Prospect in the north-central area.

Little impact on the availability of both metallic and nonmetallic minerals is foreseen due to the general lack of known economic deposits and all but hobby prospecting activity.

Leasable Minerals

Lands within the 23,690 acres recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. The 138,927 acres recommended as nonsuitable for wilderness designation would remain open to leasing under these laws.

In the area recommended as nonsuitable, oil and gas exploration is expected to occur in the western third and in the central-eastern portions. Activities would include geophysical data gathering and the drilling of two exploratory wells. Since the more accessible and promising areas of the WSA remain open to leasing in this alternative, little effect on liquid or gaseous hydrocarbon exploration is expected. Production is not anticipated.

Salable Minerals

Sand and gravel resources are abundant, particularly along the outer edges of the WSA. Because of remoteness from markets, these are largely valueless. An exception is that close location to the Meadow Valley Wash road and to the railroad creates a limited market to service these facilities. Consequently, three pits would open along the western fringe of the WSA.

Conclusion

In the area recommended as nonsuitable, the limestone is unmarketable due to distance to markets and abundance of more accessible deposits. Other metallic and nonmetallic minerals are not thought to exist at economic concentrations and quantities. Oil and gas prospects are at a rank wildcat level in the area recommended as nonsuitable. The extremely limited market for sand and gravel resources would be met by pits in the area recommended as nonsuitable. Because of these factors and considerations, the effect of this alternative on minerals development is extremely limited.

Impacts on Motorized Recreation Resources

Wilderness designation would close 23,690 acres of the WSA to motorized recreational use. One mile of way which was opened as access to a big game guzzler would be closed. There are no other motorized routes entering the area recommended as suitable. A closure is largely academic because the bulk of the area recommended as suitable is far too rugged to admit motorized vehicles. Use would drop from the current estimated annual use of ten, to zero visitor-days in the foreseeable future.

In the 139,197 acres recommended as nonsuitable, no ORV restrictions would apply. Many miles of ways would remain open to motorized use. Most of these lie in relatively enclosed, bouldery canyons, which restricts off-road access to the actual travel routes. The exceptions are the southwestern bajada and some basins on the southeastern, eastern, northeastern and northern sides. In these areas, terrain is gentler and areas currently used for motorized vehicles would see continuing and expanded use. Motorized vehicle use would grow from the estimated current annual use of 510 visitor-days to one 1000 visitor-days in the foreseeable future.

Conclusion

The numerous miles of cherrystem roads and ways would provide access to many interesting places for motorized recreationists. Access off roads and ways is limited because of terrain steepness except for portions of the southwestern, southern, southeastern, eastern and northeastern edges.

Impacts on Production of Bighorn Sheep

Bighorn sheep proponents consider the Mormon Mountains as an area of intensive, project oriented sheep management. Initial projects created some conflicts with wilderness values and consequently, habitat manipulation proponents perceived wilderness designation as an obstacle to projects and opposed wilderness status. Subsequent projects in other WSAs have proven that sensitivity to wilderness values in design, materials, siting, access and construction methods results in non-impairing, lower maintenance and more reliable wildlife projects.

Within the area recommended as suitable are three big game guzzlers and several gap fences. One of the smaller big game guzzlers has operated with moderate reliability and would continue to be maintained by a combination of vehicle and foot travel. Another has failed to operate and was recently repaired. The larger big game guzzler has operated, but not at design levels. Achieving better operational performance and lessening its effect on naturalness in its vicinity may require project redesign. A scaled down, redesigned and slightly relocated version would meet both wildlife needs and wilderness requirements. This guzzler would be maintained by driving to the edge of the area recommended as suitable and by walking the short remaining distance. Water catchments would be built using non-impairing design, siting, construction methods and access.

In the area recommended as nonsuitable, several gap fences would be maintained by a combination of driving and walking. Eight big game guzzlers, additional gap fences and two water catchments would be constructed without wilderness imposed constraints.

There is a proposal to convert an area of approximately 4,600 acres in the upper part of the WSA to grass and forbs from the current brush and pinyn-juniper vegetation type. Approximately twenty-five percent of the type would be converted to form fingers and islands of trees and brush or grass. Of the acreage, approximately 900 acres are in the area recommended as nonsuitable. Because the terrain is rough, fire would be used, either as prescribed or as let-burn prescription wildfire. The result would be reintroduction of fire into the ecosystem where it has been excluded by fire control and a probable increase in bighorn sheep, within four years, of twenty-five percent above the low point reached several years ago when a die-off occurred.

Habitat intrusion from mining exploration and vehicular use would result in some habitat erosion, particularly on the southwestern, southern, southeastern and eastern portions of the WSA. This would affect desert tortoise, bighorn sheep and marginally, quail.

Conclusion

Wilderness designation may require changes with one big game guzzler, however, no change in construction or maintenance of the other existing or proposed projects would be necessary. A vegetation management project may be compatible with the goal of reintroducing fire into the ecosystem and would increase bighorn sheep numbers as well.

Impacts on Cultural Resources

There have been 260 cultural resource sites recorded in the WSA. This alternative incorporates twenty-one significant sites within the area recommended as suitable. These sites include eleven roasting pits, two lithic scatters, six rock-shelters with rock art, one historic site and one rock feature. A study commissioned by BLM (Chambers Consultants and Planners, 1983), recommended that all of the following site types be saved: 1) Caves or shelters with rock art, 2) Shelter/roasting pit complexes, 3) Segments of the early railroad bed and associated materials and 4) Possibly, early structures in Carp. The report also recommended saving samples of: 1) Roasting pits, 2) Caves or shelters, 3) Artifact scatters and isolated artifacts including those of the post white contact period.

The Proposed Action would preserve many of these site types from surface disturbing activities and from vandalism. However, the majority of these sites are near the boundary of the area recommended as suitable and thus would remain exposed to motorized visitors.

In the area recommended as nonsuitable, the following approximate numbers of significant site types occur: 1) Roasting pits, 104; 2) Lithic scatters, 15; 3) Rock-shelters with rock art, 14; 4) Historic sites, 15; 5) Rock features, 8. Many of these are adjacent to ways which would remain open to vehicular traffic in this alternative. With the exception of some lithic scatters and some rock features, all of these site types are readily recognizable to the layman and thus vulnerable to vandalism. This alternative would provide greater protection to some of the sites in the interior of the area recommended as suitable. Mining exploration would result in the loss through salvage or disturbance of some sites in the Whitmore Mine and Iron Blossom Prospect vicinities and along the route to Hackberry Spring.

Conclusion

This alternative provides added protection to twenty-one significant cultural resource sites located in the interior of the area recommended as suitable. Because surface disturbance from mining, road construction and similar activities is strictly regulated and because the area would receive greater attention as a result of its wilderness status, vandalism would be greatly reduced. In the area recommended as nonsuitable, approximately 156 significant archeological sites lend interest, but many are likely over the long term, to be damaged by vandalism or require salvage as a result of conflicts with projects and other activities such as mining exploration in the Whitmore, Iron Blossom and Hackberry areas.

DELAMAR MOUNTAINS WSA (NV-050-0177)

Proposed Action (No Wilderness Alternative)

(Suitable: 0 acres, Nonsuitable: 126,257 acres)

None of the Delamar Mountains WSA would be recommended as suitable for wilderness designation.

Impacts on Wilderness Values

Naturalness:

In the southern portion of the WSA, two geophysical (oil and gas exploration) lines would disturb approximately six acres. If explosives are used, then a total of eight acres of surface disturbance would occur, along with six miles of low standard road. Since these lines would extend across large areas and in flatter, more visible terrain, naturalness would be impacted over a wider area, possibly up to 6,000 acres. Along the southeastern edge of the WSA, where it borders the Kane Springs Wash road, five to fifteen acres of surface disturbance would occur from sand and gravel pits. Since these would be near the road and in flatter terrain away from elevated viewpoints, little effect on the existing level of naturalness would occur. A three mile pipeline would be installed in the Pony Well cherrystem road to provide stock water. If the pipeline proves not viable, then a large catchment and storage tank would be necessary. This project would have little additional effect on naturalness except in the immediate vicinity. Two and one-half miles of fence would be constructed in the northern part of the WSA with the attendant development of a way for survey and construction access. Naturalness would be diminished in the vicinity. Existing livestock and wildlife projects all lie in areas affected by roads or accessible to ORVs and would not affect naturalness on additional acreage. Maintenance of these projects would result in a total surface disturbance of twelve acres. Along the western side, a one mile wide utility corridor would be developed containing five 500 kV powerlines, two gas and fiber optic lines and three access roads. Construction of these projects would cause 380 acres of surface disturbance and heavily impact naturalness along the western side of the WSA from the highway to the crest of the nearby ridges. In areas where casual access can be developed due to favorable terrain, ORV use would impair naturalness on 22,000 acres. This would occur in portions of the central plateau adjacent to the Pony Well cherrystem road, on portions of the southern and southeastern bajadas, in the northern end, on utility access roads and in Bomber Wash.

Solitude:

Solitude is prevalent due to the WSA's large size and lack of visitation and topographic features make it easy to find. Motorized vehicle use, project maintenance, sand and gravel pit operation, geophysical studies and a water haul all would cause intermittent impacts to solitude while activity is underway. Solitude would be intermittently impacted on 25,000 acres over the long term.

Primitive and Unconfined Recreation:

Hiking, backpacking, climbing and scrambling and photographic opportunities ranging from marginal to outstanding would remain available. Lack of water would limit extended backpacks. These opportunities would persist over the long term on approximately 95,000 acres of the WSA.

Special Features:

Special features include botanical, zoological, geological and cultural values. One State-listed plant species (Nye milk-vetch (**Astragalus nyensis Barneby**)) may be present in the WSA and desert tortoise inhabit the bajadas along the southwestern, southern and southeastern sides of the WSA. This alternative would not provide additional protection from surface disturbing activities for these species. Geologic features include extensive faults associated with the development of the Kane Springs Caldera, but would not be affected by either designation or non-designation. Over one dozen prehistoric sites recorded so far in the WSA would not receive greater protection from surface disturbing activities.

Conclusion

Wilderness and primitive recreation values ranging from marginal to outstanding would continue to be available in much of the WSA. Rugged terrain and lack of economic incentives would preclude intrusions which would affect naturalness, except on some bajadas and areas adjacent to the Pony Well cherrystem road. A utility corridor along the western side would heavily impact naturalness there. Periodic activities, primarily near current access routes, would cause temporary impairment of solitude. Wilderness values would persist on 95,000 acres and would be lost on 25,000 acres over the long term.

Impacts on Development of Mineral Resources

Locatable Minerals

All 126,257 acres of the WSA would remain open to entry under the mining laws. Potential for occurrence of economic locatable minerals is considered low and there are no mining claims within the WSA.

Leasable Minerals

All 126,257 acres of the WSA would remain available for leasing under the mineral leasing laws. The area is prospectively valuable for oil and gas. Two geophysical lines are anticipated in the southern half of the WSA. No wildcat drilling is anticipated due to high industry costs, unfavorable structure and host rocks and low industry interest.

Salable Minerals

Sand and gravel resources are present in the WSA but demand is minor due to distance to markets. Because of convenience to state and county roads, two sand and gravel pits would be opened and used along the Kane Springs Wash road.

Conclusion

Because of the limited potential for locatable minerals, low oil and gas interest and limited markets for regionally abundant sand and gravel, minimal mineral development is expected.

Impacts on Motorized Recreation Resources

All 126,257 acres of the WSA would remain open to motorized recreational use. Rugged terrain and limited roads or ways would continue to preclude motorized use except in the washes in the south, existing ways, in an area north of the way crossing the northern end of the WSA, a strip along the Pony Well cherrystem road, the area in and around Willow Spring basin, the southern two miles of the WSA and a strip along the western side. Along the Pony Well cherrystem road, flatter ground would permit some motorized recreational use off the road. In all, fifteen miles of ways and thirteen miles of Bomber Wash would remain open to motorized recreational use. An area totaling an estimated 22,000 acres would remain available for motorized recreational use.

Motorized recreational use would rise slowly from the current estimated one hundred visitor-days to two hundred visitor-days annually.

Conclusion

The currently light recreation use would grow slowly due to population growth in Las Vegas and availability of access to the area. Most of the increase would consist of vehicle-borne bird hunters.

Impacts on the Development of Utilities

Because this alternative recommends no land suitable for wilderness designation, there would be no effect on a proposed utility corridor along the WSA's western side. Opening this corridor would create a shorter route and a more desirable corridor from a resource management viewpoint. Kane Springs Valley which lies to the east of the WSA, or a longer route around the northern side of the Nevada Test Site/Nellis Range complex, are the alternative corridors.

Conclusion

This alternative allows a route for utility rights-of-way which is more desirable from both utility and resource management aspects.

Adverse Impacts Which Cannot be Avoided

The unavoidable adverse impact would be the loss of naturalness on many areas near roads and ways. Solitude would be lost intermittently over the long term due to activities which would take place under non-wilderness status. These would include ORV use, oil and gas exploration, ranching operations and hunting by vehicle.

Relationship Between Local Short-term Uses of Man's Environment and the Maintenance and Enhancement of Long-term Productivity

All present activities would continue in the WSA. Energy exploration, ranching use, utility installation, ORV use and hunting would reduce wilderness values in the outer portions of the WSA and adjacent to access routes over the long term.

Irreversible and Irretrievable Commitments of Resources

On the 31,000 acres where utility construction, geophysical exploration, ORV use and sand and gravel pit development would take place, surface disturbance would create an irreversible loss of wilderness resources.

All Wilderness Alternative

(Suitable: 126,257 acres, Nonsuitable: 0 acres)

All of the WSA would be recommended as suitable for wilderness designation.

Impacts on Wilderness Values

Naturalness:

Nine miles of fences, three reservoirs, one tank, two spring developments, a trough, a water haul, a corral and ten quail guzzlers would continue to affect naturalness on approximately seven hundred acres directly and a larger acreage indirectly through affecting the viewshed. A three mile pipeline would be installed in the Pony Well cherrystem road to provide stock water. This project would have minimal effect on wilderness values except in the immediate vicinity during construction. If a pipeline is not viable, then a large catchment and tank may be necessary and this would affect naturalness in the nearby area. Two and one-half miles of fence would be constructed in the northern part of the WSA. Naturalness would be slightly diminished in the vicinity.

Solitude:

Solitude is abundant due to the WSA's large size. In the central plateau and on the bajadas of the western, southern and eastern sides, lack of topographic relief inhibits the ability to find secluded spots, but the vastness of the area tends to mitigate this shortcoming. Within the core plateau region, several deep, twisting canyons provide cliffs and topographic relief. Around the fringes of the WSA's uplands are steep cliffs and mountains. Visitation is light and expected to remain light in the future, therefore solitude would not likely be affected by concentrations of wilderness users. Occasional motor vehicle traffic along the Pony Well and Willow Spring cherrystem roads would depreciate naturalness and solitude for some distance beside the road, but even here the terrain is rolling and screening would be effective. Operation of the water haul, which would eventually be replaced by another system, would cause occasional loss of solitude in the vicinity of the Pony Well cherrystem road during times of the year when cattle are present. Occasional project maintenance would temporarily interfere with solitude in the vicinity of activity.

Primitive and Unconfined Recreation:

Primitive recreation opportunities ranging from marginal to outstanding would be protected by designation. These consist of hiking, backpacking, climbing and scrambling and photography. Lack of water would limit extended summer backpacks. In the areas away from roads, ways and bajadas, primitive recreation would persist over the long term regardless of this area's wilderness status. However, designation would assure that these opportunities persist over the long term throughout the entire WSA.

Special Features:

Special features include botanical, zoological, geological and cultural values. One State-listed plant species (Nye milkvetch) (**Astragalus nyensis Barneby**) may be present in the WSA and desert tortoise inhabit the bajadas along the southwestern, southern and southeastern sides of the WSA. This alternative would provide additional protection from surface disturbing activities for these species. Geologic features include extensive faults associated with the development of the Kane Springs Caldera, but would not be affected by either designation or non-designation. Over one dozen prehistoric sites recorded so far in the WSA would receive greater protection from surface disturbing activities.

Conclusion

Except where occasionally affected adjacent to two cherrystem roads, wilderness designation would preserve wilderness and primitive recreation values ranging from marginal to outstanding throughout the WSA.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 126,257 acres recommended as suitable would be withdrawn from entry under the mining laws. Potential for occurrence of economic locatable minerals is considered low and there are no mining claims. Little effect on mineral development potential is foreseen due to the low potential and lack of claims. If, prior to designation, claims should be filed in the area subsequently designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Leasable Minerals

All lands within the 126,257 acres of the WSA recommended as suitable would not be available for leasing under the mineral leasing laws, if surface occupancy is required. The area is prospectively valuable for oil and gas. If not designated as wilderness, two geophysical lines would be expected in the southern half of the WSA. No wildcat drilling would be anticipated due to high industry costs, unfavorable structure and host rocks and the lack of industry interest.

Salable Minerals

Sand and gravel resources are present in the WSA but with minor demand due to distance to markets. Sand and gravel for local road use is readily available in the region from abundant supplies.

Conclusion

Limited potential for locatable minerals, low oil and gas interest and limited market for regionally abundant sand and gravel means that wilderness designation would have little effect on minerals development.

Impacts on Motorized Recreation Resources

All 126,257 acres of the WSA would be closed to motorized vehicle use. Fifteen miles of ways and use of washes, primarily the thirteen miles of Bomber Wash, would be unavailable to vehicle use. Seven miles of the Pony Well and Willow Spring cherrystem roads would remain open to vehicles. Motorized use would be precluded on approximately 6,400 acres along the Pony Well cherrystem road, approximately 8,300 acres on the north, 2,500 acres around Willow Spring, and 4,500 acres along the southern fringe.

Motorized vehicle use would remain about the same as currently, one hundred visitor-days annually in the foreseeable future, but that portion using the washes would shift to the Pony Well and Willow Spring cherrystem roads.

Conclusion

There would be little change in levels of motorized use. A shift would occur in use from the washes to the cherrystem roads.

Impacts on the Development of Utilities

This alternative would virtually close off the limited corridor along Highway 93. This would necessitate the use of Kane Springs Valley along the eastern side of the WSA, or a much longer route around the northern side of the Nevada Test Site/Nellis Range Complex. This adds considerable mileage to a route, particularly around the test site/range complex, and creates additional resource conflicts.

Conclusion

Longer utility corridors resulting from this alternative would create additional resource conflicts.

Resource Development Alternative
(Partial Wilderness Alternative)

(Suitable: 48,164 acres, Nonsuitable: 78,093 acres)

The Resource Development alternative recommends as suitable for wilderness designation, the core area of the WSA with the exception of a wide area adjacent to the Pony Well cherrystem road.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

The area recommended as suitable is confined to the central plateau portion of the Delamar Mountains WSA. No intrusions interrupt naturalness in this area, except for about one mile of an obscure way extending from the end of the Pony Well cherrystem road and affecting approximately seventy acres. Naturalness would be preserved over most of the area over the long term.

Naturalness (Nonsuitable Portion):

In the area recommended as nonsuitable, naturalness ranges from marginal to outstanding. Intrusions are caused by the five-mile Pony Well and two-mile Willow Spring cherrystem roads, some associated stock water facilities, nine miles of fence, a water haul, corral and from approximately eleven miles of ways. In areas where casual access can be developed due to favorable terrain, ORV use would impair naturalness on 20,000 acres. This would occur in portions of the central plateau adjacent to the Pony Well cherrystem road, on portions of the southern and southeastern bajadas, on the northern end, in lower Bomber Wash and on utility access roads. Along the western side, a one mile wide utility corridor would be developed containing five 500 kV powerlines, two gas and fiber optic lines and

best copy available

three access roads. Construction of these projects would cause 380 acres of surface disturbance and heavily impact naturalness along the western side of the WSA from the highway to the crest of the nearby ridges. In the southern portion of the WSA, two geophysical lines would disturb approximately six acres. If explosives are used, approximately six miles of roads and eight acres of disturbance would result. Since these would be scattered across large areas and in flatter terrain, more visible from elevated viewpoints, naturalness would be disturbed in about twenty percent of the area, or 6,000 acres. Along the southeastern edge of the WSA, where it borders the Kane Springs Wash road, five to fifteen acres of surface disturbance would occur in conjunction with sand and gravel pits. Since these would be near the road and in flatter terrain away from elevated viewpoints, little effect on the existing level of naturalness would occur. A three mile pipeline would be installed in the Pony Well cherrystem road to provide stock water. If the pipeline proves not viable, then a large catchment and storage tank would be necessary. This project would have minimal effect on naturalness except in the immediate vicinity during construction. Two and one-half miles of fence would be constructed in the northern part of the WSA with the attendant development of a way for survey and construction access. Naturalness would be diminished in the vicinity. All told, naturalness would be impaired on approximately 23,000 acres with this alternative.

Solitude (Suitable Portion):

Lack of sharp topographic relief on portions of the plateau somewhat inhibits the ability to find solitude or seclusion. However, several deep twisting canyons incise the plateau, while the upland itself, sprawls across such great distances that size itself, provides solitude. Along the borders of the area recommended as suitable are steep cliffs on the western and hills on the eastern sides which provide solitude. Solitude would be affected beside the Pony Well cherrystem road from ORV traffic and from a water haul for cattle, until the water haul is replaced. Occasional project maintenance activities would cause intermittent impacts to solitude.

Solitude (Nonsuitable Portion):

Solitude is readily attainable in the canyons and cliffs along the western and northern sides, in the hills in the northern and eastern areas and in the canyons on the upper portions of the southern area. Solitude is fairly difficult to obtain on the bajadas of the northern, western, southern and eastern portions and would be largely lost with this alternative due to ORV use along and off cherrystem roads and ways, in lower Bomber Wash, and from project maintenance, sand and gravel pit operations and occasional activities like geophysical data gathering and utility construction and maintenance.

Primitive and Unconfined Recreation (Suitable Portion):

Dayhikes, backpacks, climbing and scrambling and nature study opportunities range from good to outstanding and would be preserved over the long term by designation. Lack of water would interfere with long summer backpacks. These would persist for the long term on 48,000 acres of the WSA.

Primitive and Unconfined Recreation (Nonsuitable Portion):

Primitive recreation opportunities range from marginal on the bajadas to outstanding in the more severe terrain in and surrounding the uplands. In bajada areas and along the power line roads where casual access can be developed due to favorable terrain and construction, ORV use would conflict with primitive recreation opportunities. Occasional motorized use as identified previously would cause a loss of primitive recreation opportunities over the long term.

Special Features (Suitable Portion):

One State-listed plant species (Nye milk-vetch) (**Astragalus nyensis Barneby**) is found at altitudes up to 5,600 ft. and thus may be present in the area recommended as suitable. Geologic features include extensive faults associated with the development of the Kane Springs Caldera which are being studied, but would not be affected by either designation or non-designation. Butte-like formations and mesas add interest.

Special Features: (Nonsuitable Portion)

Special features include botanical, zoological, geological and cultural values. One State-listed plant species (Nye milk-vetch) (**Astragalus nyensis Barneby**) may be present in the WSA and desert tortoise inhabit the bajadas along the southwestern, southern and southeastern sides of the WSA. This alternative would not provide additional protection from surface disturbing activities for these species. Geologic features include extensive faults associated with the development of the Kane Springs Caldera, but would not be affected by either designation or non-designation. Over one dozen prehistoric sites recorded so far in the WSA would not receive greater protection from surface disturbing activities.

Conclusion

With this alternative, wilderness and primitive recreation values would continue to be available in the central area of the WSA. In the portion recommended as nonsuitable, rugged terrain in some areas and lack of economic incentives in others would preclude intrusions to naturalness and solitude except on the southern end of the plateau and on some bajadas and areas adjacent to the Pony Well and Willow Spring cherrystem roads.

Impact on Development of Mineral Resources

Locatable Minerals

All lands within the 48,164 acres recommended as suitable would be withdrawn from entry under the mining laws. The 78,093 acres recommended as nonsuitable would remain open to entry under these laws.

Potential for occurrence of economic locatable minerals, is considered low and there are no mining claims. Little effect on mineral development is foreseen due to the low potential and lack of claims. If, prior to designation, claims should be filed in the area subsequently designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Leasable Minerals

All 48,164 acres of the lands recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. All lands within the 78,093 acres recommended as nonsuitable would remain open to leasing. The area is prospectively valuable for oil and gas and two geophysical lines are expected in the southern half of the WSA. No wildcat drilling is anticipated due to high industry costs, unfavorable structure and host rocks and the fact that only about thirty percent of the WSA is leased.

Salable Minerals

Sand and gravel resources are present in the WSA, primarily in the area recommended as nonsuitable, but with minor demand due to distance to markets. Because of convenience to State and county roads, some sand and gravel pits would be opened and used.

Conclusion

Limited potential for locatable minerals and low oil and gas interest mean that designation of the area recommended as suitable would have little effect on mineral development. In the area recommended as nonsuitable, geophysical exploration could occur and a slight level of convenience attained by road crews in obtaining sand and gravel from WSA areas adjacent to the roads bordering the WSA.

Impacts on Motorized Recreation Resources

Recreational off-road vehicle use would be precluded in the 48,164 acres recommended as suitable. The remaining 78,093 acres recommended as nonsuitable would remain open to motorized recreational use. Approximately six miles of Bomber Wash and one mile of way would be closed and fourteen miles of ways and seven miles of Bomber Wash would remain open to motorized recreational use. Approximately 6,400 acres along the Pony Well cherrystem road, approximately 8,300 acres in the north, 2,500 acres around Willow Spring and 4,500 acres along the southern fringes would remain open to ORV use. Most of the remaining acreage both within and external to the area recommended as suitable is too precipitous or rocky to allow much motorized traffic. Motorized recreational use would be essentially unaffected in the area recommended as suitable, falling to zero from the current estimated use of ten visitor-days annually. In the area recommended as nonsuitable, motorized recreational use would rise from the current annual estimated ninety visitor-days to two hundred visitor-days in the foreseeable future.

Conclusion

This alternative would have little effect on currently used access routes and thus would have little effect on use by motorized recreationists.

Impacts on the Development of Utilities

This alternative would have no effect on lands desired for a utility corridor along the western side. Opening this corridor would create a shorter route and a more desirable corridor from a resource management viewpoint. Kane Springs Valley which lies to the east of the WSA, or a longer route around the north side of the Nevada Test Site/Nellis Range complex, are the alternative corridors.

Conclusion

This alternative allows a route for utility rights-of-way which is more desirable from both utility and resource management aspects.

Wilderness Accent Alternative

(Partial Wilderness Alternative)

(Suitable: 102,490 acres, Nonsuitable: 23,767 acres)

The Wilderness Accent alternative recommends most of the Delamar Mountains WSA as suitable for wilderness designation with the exception of areas of marginal wilderness and primitive recreation quality along the northern, western, southern and southeastern fringes.

Impacts on Wilderness Values

Naturalness (Suitable Portion):

Naturalness prevails over ninety percent of the area recommended as suitable for wilderness designation, and would be preserved by designation. Existing intrusions which would be maintained include, seven miles of fence, three reservoirs, one tank, one water haul, two spring developments, one trough, one corral and two-and-a-half miles of pipeline. The five mile Pony Well road and two mile Willow Spring roads would remain. Two and one-half miles of fence would be constructed in the northern part of the WSA and naturalness would be slightly diminished in the vicinity. In the viewshed of the Pony Well cherrystem road, occasional motor vehicle use of the road would depreciate naturalness intermittently over the long term. Three and one-quarter miles of way in the south would be rehabilitated improving naturalness in the vicinity.

Naturalness (Nonsuitable Portion):

In the area recommended as nonsuitable, naturalness is intruded by occasional vehicle tracks, a four-mile way on the north, a mile and-a-half way on the south, and a three-mile cherrystem road with water developments associated with Willow Spring.

A three mile pipeline would be installed in the Pony Well cherrystem road to provide stock water. This project would have minimal effect on naturalness except in the immediate vicinity during construction. Along the western side, a one mile wide utility corridor (narrowing to one-half mile near the southwestern end) would be developed containing five 500 kV powerlines, two gas and fiber optic lines and three access roads. Construction of these projects would cause 320 acres of surface disturbance and heavily impact naturalness along the western side of the WSA from the highway to the crest of the nearby ridges. ORV use on the northern, southern and southeastern sides would cause long-term impairment. In total, naturalness would be impaired on about 20,000 acres with this alternative.

Solitude (Suitable Portion):

Solitude prevails due to the large size of the area recommended as suitable and its location well into the upland portion of the WSA. Central portions of the plateau lack topographic relief which inhibits the ability to find secluded spots, but the vastness of the area trends to mitigate this shortcoming. Several deep, twisting canyons penetrate the plateau and provide cliffs and topographic relief. Around the fringes of the WSA's uplands are steep cliffs and mountains. The combination of large area and topographic relief would provide opportunities for solitude over the bulk of the area recommended as suitable. Exceptions would occur primarily in the area adjacent to the Pony Well cherrystem road where occasional vehicle traffic would intrude on solitude.

Solitude (Nonsuitable Portion):

Solitude is difficult to find on the bajadas due to lack of higher vegetation and terrain relief and because they are usually only one mile, ranging to two miles, wide and are bordered by intrusions composed of highways, roads and powerlines. Solitude ranges from marginal to possibly moderate in the Willow Spring area. In portions of the central plateau adjacent to the Pony Well cherrystem road, occasional motor vehicle use would depreciate naturalness and solitude. Occasional ORV use along the northern, southern, and southeastern sides and construction of powerlines and use of their access roads along the western side would cause occasional, but long-term impairment of wilderness values in these areas.

Primitive and Unconfined Recreation (Suitable Portion):

Designation would help assure preservation of primitive recreation opportunities ranging from good to outstanding. These include dayhiking, backpacking, climbing and scrambling and photography. Lack of water would limit extended backpacks during hotter periods.

Primitive and Unconfined Recreation Use (Nonsuitable Portion):

Primitive recreation opportunities in the area recommended as nonsuitable are generally of low value because these lands are mostly flatter and adjacent to roads. Some dayhiking, backpacking and photographic opportunities would persist over the long term, particularly in the areas away from roads and near the uplands. Close to the WSA boundaries, these opportunities would be lost due to vehicle use and other disturbances.

Conclusion

With wilderness designation, wilderness and primitive recreation values ranging from good to outstanding would be preserved over the long term. Areas not recommended as suitable have marginal wilderness and primitive recreation values and would lose most of these over the long term.

Impacts on Development of Mineral Resources

Locatable Minerals

All lands within the 102,490 acres recommended as suitable would be withdrawn from entry under the mining laws. The 23,767 acres recommended as nonsuitable would remain open under these laws. If, prior to designation, claims should be filed in the area subsequently designated as wilderness, no exploration or development would occur except on claims having valid discoveries at the time of designation.

Potential for occurrence of economic locatable minerals is considered low and there are no mining claims. Therefore, this alternative would have little effect on mineral development potential.

Leasable Minerals

Lands within the 102,490 acres of the lands recommended as suitable would not be available for leasing under the mineral leasing laws if surface occupancy is required. All lands within the 23,767 acres recommended as nonsuitable would remain open to leasing under these laws. The area is prospectively valuable for oil and gas. One geophysical line is expected in the southern area of the WSA in the portion recommended as nonsuitable. No wildcat drilling is anticipated due to high industry costs, unfavorable structure and host rocks and the fact that only about thirty percent of the WSA is leased.

Salable Minerals

Sand and gravel resources are present in the WSA primarily in the area recommended as nonsuitable, but with minor demand due to distance to markets. Because of convenience to state and county roads, sand and gravel pits would be opened and used along the Kane Springs Wash road and along Highway 93.

Conclusion

Limited potential for locatable minerals and low oil and gas interest mean that designation of the area recommended as suitable would have little effect on mineral development. In the area recommended as nonsuitable, geophysical exploration could occur and a slight level of convenience attained by road crews in obtaining sand and gravel from areas adjacent to the roads near the WSA.

Impacts on Motorized Recreation Resources

Motorized vehicle use would be precluded on 102,490 acres recommended as suitable. The remaining 23,767 acres recommended as nonsuitable would remain open to ORV use. Approximately six miles of way and ten miles of Bomber Wash would be closed to ORV use. Five miles of ways and three miles of Bomber Wash would remain open to motorized recreational use. Approximately 1,900 acres on the north, 2,500 acres around Willow Spring and 4,500 acres along the southern fringes would remain open to ORV use. Approximately 6,400 acres along the Pony Well cherrystem road would be closed to ORV use. Most of the remaining acreage both within and external to the area recommended as suitable is too precipitous or rocky to allow much motorized traffic.

Motorized recreational use would be affected slightly due to the closing of some ways and part of Bomber Wash, but would continue to grow due to population growth in Las Vegas. In the area recommended as suitable it would fall from the current estimated use of twenty visitor-days to ten visitor-days annually. It would rise rise from the current annual estimated 80 visitor-days to 150 visitor-days in the foreseeable future in the area recommended as nonsuitable.

Conclusion

Motorized recreational use would be displaced from a portion of the routes now available and become more concentrated on the remaining ones. ORV use would continue to grow due to population growth.

Impacts on the Development of Utilities

This alternative would have minimal effect on lands desired for a utility corridor along the western side. Opening this corridor would create a shorter route and a more desirable corridor from a resource management viewpoint. Kane Springs Valley which lies to the east of the WSA, or a longer route around the northern side of the Nevada Test Site/Nellis Range complex, are the alternative corridors.

Conclusion

This alternative allows a route for utility rights-of-way which is more desirable from both utility and resource management aspects.

CHAPTER FIVE

Consultation, Coordination and Public Comment

Consultation, Coordination, Public Participation and List of Preparers

Consultation and Coordination

Coordination began with the wilderness inventory process of the late 1970's wherein roadless areas with the requisite wilderness features were identified. The current phase of the process, the wilderness study and EIS phase, began with a *Federal Register* Notice published in February, 1983, which commenced the issue identification process. News releases and a mailing to public entities, allotment holders, mining claimants of record, conservation groups, interested individuals and others, accompanied the start of this effort. Similar notification preceded the scoping phase. State agencies were briefed through the State Clearinghouse's auspices on July 29, 1983. Public workshops were held in Caliente, Nevada on June 29, 1983, and in Las Vegas, Nevada on June 30, 1983. Input derived from written and oral submissions from these sources was used to develop the issues and array of alternatives for analysis in this EIS.

EIS Review

The Caliente Wilderness EIS was released the week of September 19, 1983, and filed with the Environmental Protection Agency. The draft EIS was sent to all individuals, agencies and groups who had expressed an interest in the Caliente Wilderness Planning process. Any others conceivably having an interest were also sent copies. The mailing list exceeded 400 entries. Copies of the EIS were also sent to local agencies and organizations and were available for review at public libraries within the region. Copies were also available at the listed BLM district offices, including the Las Vegas District Office. The list of agencies and organizations to which copies were sent appears in Tables 5-1.

A public comment period ran from September 28, 1983, to January 2, 1984. EIS hearings were held in Las Vegas, Nevada, November 14, 1983, and in Caliente, Nevada, November 15, 1983. Comments and related responses are printed at the end of the Chapter.

Comments

A total of 173 written and 7 oral comments were received as a result of public review. All of the written comments are reproduced in this chapter.

All letters and testimony were reviewed carefully. Substantive comments which questioned facts and/or analysis or commented on issues bearing directly on the draft EIS were evaluated and responded to. Changes and additions necessitated by substantive comments have resulted in appropriate changes to the EIS.

Index of Letters and Oral/Written Statements

Comment letters and statements are listed and numbered in Table 5-2. The numbers are used to correlate reprinted letters with responses.

Consistency With Other Plans

Federal Agencies

The Air Force has generally supported wilderness designations, but desires to continue the use of wilderness areas for the placement by helicopter of portable solar powered electronic training aids and desires assurances that use of airspace above wilderness areas for training can continue.

State Agencies

The Division of Forestry supports designation of possibly one of the WSAs (South Pahroc Range) as wilderness, noting that some prime pinyon-juniper sites exist in some WSAs. The agency prefers that most of these remain in "multiple management".

Historic Preservation and Archeology desires that BLM consider whether or not known significant cultural resources or Native American uses in the WSAs are better managed through wilderness designation or through other multiple use emphasis.

State Parks generally supports wilderness designation and cites substantial support for the types of recreation best accommodated in wilderness designation, in the Nevada Statewide Comprehensive Recreation Plan. Additional support is cited from the Governor's Commission on the Future of Nevada.

Water Planning notes that access to developed water sources must be maintained and that several of the WSAs are wholly or partly in designated water basins. The Department of Conservation and Natural Resources provided a draft position paper which actively supports the establishment of wilderness areas in Nevada in accordance with certain basic principles and provided a comprehensive list of these principles to be considered in analyzing wilderness suitability.

Department of Transportation gave conditional support as long as existing transportation corridors, including specifically, realignment of the Kane Springs Road, are not affected.

Environmental Protection noted that WSAs near the power plant site in Dry Lake Valley may sustain significant air quality impacts from SO^2, TSP, and NO^2.

Department of Wildlife expressed concern about the effect of wilderness designation on introduction of elk, if they had not been historically present. Consideration of crucial desert tortoise habitat on the west side of the Delamar Mountains was proposed. Focus on the effects of wilderness designation on threatened or endangered fish species was also counselled.

Bureau of Mines recommends waiting until the results of current and planned mineral studies are complete before drawing boundaries. If time doesn't allow selection of the Resource Development Alternative (based apparently on these study results), then the No Action Alternative is recommended.

County Government

We have determined no conflict with Lincoln County plans.

Lincoln County Conservation District

The district finds that the areas are wilderness, inaccessible to vehicles, little used, will always be wilderness and consequently no reason exists for designation of these areas as wilderness. They, therefore object to designation of any areas as wilderness in the Caliente Resource Area.

Table 5-1

AGENCIES, ORGANIZATIONS AND ELECTED OFFICIALS TO WHOM THE DRAFT EIS WAS SENT

Federal Agencies

Department of Agriculture

Dixie National Forest
Soil Conservation Service
Department of Commerce
NOAA - National Weather Service

Corps of Engineers
Air Force - Environmental Policy and Assessment
- Tactical Air Command, Langley AFB, VA
- Tactical Fighter Weapons Command, Nellis AFB, NV

Department of Energy
- Washington D.C.
- Western Area Power Administration

Department of the Interior
- Bureau of Indian Affairs
- Bureau of Mines, Western Field Operation Center
- Bureau of Reclamation, Colorado Regional Office
- Fish and Wildlife Service
- Geological Survey
- National Park Service
- Regional Office
- Interagency Archaeological Services
- Office of Public Analysis

Department of Transportation

Environmental Protection Agency
- Washington Office
- Region IX

Advisory Council on Historic Preservation

Federal Land Bank of Richfield Utah

Federal Elected Officials

Senator Chic Hecht, Nevada
Senator Paul Laxalt, Nevada
Representative Harry Reid, Nevada
Representative Barbara Vucanovich, Nevada
Senator Orrin Hatch, Utah
Senator Jake Garn, Utah
Representative Dan Marriott, Utah
Representative James Hansen, Utah

Governors

Governor Richard Bryan, Nevada
Governor Scott Matheson, Utah
Lt. Governor Robert Cashell, Nevada

State Agencies

Community Services (NV) - (State Clearinghouse distributes copies to State agencies)
Department of Wildlife (NV)
State Planning Coordinator (UT)
Energy Office (UT)

State Elected Officials

Southern Nevada State Senators and Assemblymen

Local Government

Lincoln County Commissioners, Nevada
Lincoln County Manager
Iron County Commissioners, Utah
Washington County Commissioner, Utah
Lincoln County Conservation District (quasi-governmental)
Mayor, Caliente, Nevada
Pioche Town Advisory Board, Nevada
Panaca Town Advisory Board, Nevada
Alamo Town Advisory Board, Nevada

Five County Association of Governments, St. George, Utah
Clark County Commission
Clark County Department of Comprehensive Planning
Local Cites
Los Angeles Department of Water and Power
Lincoln County Power

Universities

University of Nevada, Reno

- AIME Nevada Section
- Desert Research Institute
- Fleischmann College of Agriculture
- Agricultural and Resource Economics, Animal Science
- Lincoln County Extension Agent
- Mackay School of Mines
- Nevada Bureau of Mines and Geology
- Renewable Natural Resources
- Society for Range Management
- Water Resources

University of Nevada, Las Vegas

- AIME, Southern Nevada Section
- Archeological Survey Division
- Business and Economic Research
- College of Science
- Physics Department
- Desert Research Institute
- Museum of Natural History

Northern Illinois University
Northwestern University
University of Utah
Utah State University

State Multiple Use Advisory Board

Advisory Boards

Las Vegas District Grazing Advisory Board
Las Vegas District Multiple-Use Advisory Council
N-5 Grazing Advisory Board, Caliente
Lincoln County Game Board

Business

AM-ARCS of Nevada
AMAX Exploration, Inc.
AMOCO Production Co. (USA)
ASARCO Inc.
Atlantic Richfield Company

Mountain Magic Photography
C&C Mining and Land Company
COMINCO American, Inc.
Denison Mines
El Paso Natural Gas Company
Envirosphere Company
Golden Triangle Exploration Company, Ltd.
Homestake Mining Company
Hulse Engineering/Lincoln Exploration
Husky Mining Company
KLAS-TV
Land Mining Abstractor
Lincoln Exploration, Inc.
Lincoln County Telephone Company
Meridian Minerals Company
Moapa Valley Mining Company
Nevada Power Company
Noranda Exploration
Panaca Irrigation Company
Paramount Perlite Company
Pioche Public Utilities
Placid Oil Company
Queenstake Resources (USA)
Review of New Energy Technology
Skogsberg U.S., Ltd.
Snyder Oil
Southern California Edison Company
Utah International, Inc.
Western Range Service
White Pine Power Project

Organizations

American Fisheries Society
American Horse Protection Association
American Mining Congress
American Wilderness Alliance
Audubon Society
Caliente Rotary Club
Chamber of Commerce, Cedar City, UT
Chamber of Commerce, Caliente, NV
Chamber of Commerce, Pioche, NV
Chamber of Commerce, St. George, UT
Chamber of Commerce, U.S., Washington, D.C.
Citizen Alert
Defenders of Wildlife
Desert Bighorn Council
Desert Sportsman Rifle and Pistol
Desert Tortoise Council
Earth First

Ecology Center of Southern California
Fraternity of Desert Bighorn
Friends of Nevada Wilderness
Friends of the Earth
Funds for Animals, Inc.
Great Basin Zoological Society
Greenpeace
Humane Society of Southern Nevada
International Society for the Protection of Wild Horses and Burros
Las Vegas Bronco Club
Las Vegas Jeep Club
Las Vegas League of Women Voters
Las Vegas Tribal Council
MRAN
Minerals Exploration Coalition
Moapa Band of Paiutes
Moapa Business Council
NORA
NORVA
NRDC Public Lands Institute
National Mustang Association
National Wild Horse Association
National Wildlife Federation
Natural Resources Defense Council, Inc.
Nature Conservancy
Nevada Board of Sheep Commissioners
Nevada Cattlemen's Association
Nevada Conservation Commission
Nevada Conservation Forum
Nevada Land Action Association
Nevada Miners and Prospectors Association
Nevada Mining Association
Nevada Mining Council
Nevada Organization for Wildlife
Nevada Prospector's Association
Nevada Recreation and Park Society
Nevada State Cowbelles
Nevada Wilderness Association
Nevada Wildlife Federation
Nevada Woolgrowers Association
Northern Nevada Native Plant Society
Pacific Legal Foundation
Pioche Rod and Gun Club
Pioche Rotary Club
SNORE
Sierra Club Legal Defense Fund
Soil Conservation Society of America
Southern Nevada Environmental Forum
Southern Nevada Landcruisers
Southern Nevada Museum Association
The Wilderness Society
The Wildlife Society
Washington County Cattlemen's Association
Wildlife Management Institute

Others

Grazing permit holders in WSAs.
Mining claimants of record in WSAs.

Public Libraries

Boulder City Library
539 California Street
Boulder City, Nevada

Cedar City Public Library
136 W. Center
Cedar City, Utah 84720

Charleston Heights Library
800 Brush St.
Las Vegas, Nevada 89107

Clark County Community College
Learning Resource Center
3200 E. Cheyenne Ave.
North Las Vegas, Nevada 89030

Clark County Library
1401 E. Flamingo Road
Las Vegas, Nevada 89109

Colorado State University Library
Fort Collins, Co.

Henderson Library
Henderson, Nevada 89015

Lincoln County Library
Box 428
Pioche, Nevada 89043

Lincoln County Library
Caliente Branch
Box 306
Caliente, Nevada 89008

Las Vegas Public Library
1726 E. Charleston Boulevard
Las Vegas, Nevada 89104

North Las Vegas Library
2300 Civic Center Dr.
North Las Vegas, Nevada 89030

St. George Public Library
55 West Tabernacle
St. George, Utah 84770

University of Nevada, Reno
Getchell Library
Gov't Publications Dept.
Reno, Nevada 89507

University of Nevada, Las Vegas
Library
4505 Maryland Parkway
Las Vegas, Nevada 89154

Washoe County Library
301 S. Center Street
Reno, Nevada 789505

White Pine County Library
Courthouse Plaza
Ely, Nevada 89301

Bureau of Land Management Offices

Office of Public Affairs, BLM
18th and C Streets, NW
Washington, D.C. 20240

Alaska State Office
701 C. Street
Anchorage, AK 95513

California State Office
2800 Cottage Way, E-2841
Sacramento, CA 95825

Idaho State Office
3380 American Terrace
Boise, ID 83706

Montana State Office
222 N. 32nd St.
Billings, MT 59107

Nevada State Office
300 Booth Street
Reno, Nevada 895200

Colorado State Office
1037 20th St.
Denver, CO 80202

New Mexico State Office
P.O. Box 1449
Santa Fe, NM 87501

Oregon State Office
729 NE Oregon St.
Portland, OR 97208

Wyoming State Office
2515 Sarren Avenue
Cheyenne, WY 82001

Battle Mountain District Office
North 2nd and South Scott St.
Battle Mountain, Nevada 89820

Carson City District Office
1050 E. William Street
Carson City, Nevada 89701

Elko District Office
2002 Idaho Street
Elko, Nevada 89801

Ely District Office
Star Route 5, Box 1
Ely, Nevada 89301

Las Vegas District Office
4765 West Vegas Drive
Las Vegas, Nevada 89126

Winnemucca District Office
705 East 4th Street
Winnemucca, Nevada 89445

Arizona Strip District Office
196 East Tabernacle
St. George, Utah 84770

Cedar City District Office
1579 North Main
Cedar City, Utah 84720

Riverside District Office
1695 Spruce Street
Riverside, California 92507

Phoenix District Office
2929 West Charleston Avenue
Phoenix, Arizona 85017

Tonopah Resource Area Office
102 Old Radar Base
Tonopah, Nevada 89049

Table 5-2

INDEX OF COMMENT LETTERS

Letter Number	Agency, Organization or Individual
1.	Governor's Consistency Review - John Walker, Nevada State Office of Community Services
2.	Governor's State Position - Linda Ryan, Nevada State Office of Community Services
3.	USDI, Bureau of Mines, Western Field Operation Center
4.	USDI, Geological Survey, Assistant Director for Engineering Geology
5.	USDI, National Park Service, Western Region
6.	USDI, DOD, Air Force, Regional Civil Engineer, Western Region
7.	USDI, DOE, Western Area Power Administration
8.	U.S. Environmental Protection Agency, Region IX
9.	State Agency Comments - John Walker, Nevada State Office of Community Services
10.	Nevada Bureau of Mines and Geology, UNR
11.	Department of Minerals, State of Nevada
12.	Department of History, UNR, James Hulse
13.	Division of Environmental Studies, Benjamin Orlove, U.C. Davis
14.	Clark County Department of Comprehensive Planning
15.	Los Angeles Department of Water and Power, White Pine Power Project
16.	Freeport Exploration Company, M.L. Berkbigler
17.	Mountain Magic, Steve Werble
18.	Nevada Discovery Tours, Jean Ford
19.	Southern California Edison Company
20.	Citizen Alert
21.	Defenders of Wildlife
22.	Ecology Center of Southern California
23.	Nevada Wildlife Federation, Inc.
24.	Sierra Club, National BLM Wilderness Chairman
25.	Sierra Club, Redwood Chapter
26.	Sierra Club, Toiyabe Chapter, Las Vegas Group, Public Lands Chairman
27.	Sierra Club, Toiyabe Chapter, Las Vegas Group, Wilderness Chairman
28.	Wild Horse Organized Assistance (WHOA!)
29.	Wilderness Society, Inc.
30.	Wildlife Management Institute
31.	Wildlife Society, The

Table 5-2

INDEX OF COMMENT LETTERS

Letter Number	Agency, Organization or Invididual
32.	Alderson, Doug
33.*	Allen, Margaret
	Allen, Milton
34.*	Aegaueta, Ph.D., Dorothy
	Baruch, Rose
	Baruch, Sierra
	Baruch, Suanne
	Baruch, William
35.	Avellar, George L.
36.	Barbour, Laurie Ann
37.	Barbuck, Walter
38.	Bernshaw, Elliott
39.	Bliss, Thomas
40.	Borzone, Hal
41.	Bowen, Anita A.
42.	Brier, Marc
43.	Brown, Angus
44.	Bye, Marie
45.	Canfield Ph.D., John C.
46.	Carl, P. Kay
47.	Chaplick, John
48.	Christoph, Marquerite
49.	Cinkoske, Cheri
50.	Cleerey, Stuart
51.	Clifford, Paul C.
52.	Clifford, Paul C.
53.	Clifford, Paul C.
54.	Clifford, Paul C.
55.	Coho, Carolyn
56.	Conner, Doug
57.*	Cunningham, Cynthia
	Cunningham, Harold
58.	Dargan, Tom
59.	DeRecat, Nicole R.
60.	Dingacci, Lorie
61.	Draney, Curtis T.
62.*	Dubuy, M.D., Carl T.
	Dubuy, Emilie I.
63.	Earlenbaugh, Marcia E.
64.	Eley, James S.
65.	Evenson, John

Table 5-2

INDEX OF COMMENT LETTERS

Letter Number	Agency, Organization or Invididual
66.	Farley, Paul J.
67.	Faryna, Ellen
68.	Fischer, Virlis
69.	Follis, Mrs. Betty
70.*	Full, Beverly A. Full, Elliott D.
71.	Furtek, Bob
72.	Gailey, Mark
73.	Geffen, Alice
74.	Gibble, Dr. Walter
75.	Girdler, Barbara K.
76.	Glaser, PhD., N. William
77.	Good, Ron P.
78.	Graber, MD., David J.
79.	Greenman, J.N.R.
80.	Harold, R. Andy
81.	Hester, Mrs. Nilda
82.	Hiers, Richard and Family
83.	Himmelreich, Jesse L.
84.	Holaday, Bobbie
85.	Hoppus, Michael L.
86.	Hutchison, Alan D.
87.	Idler, MD., Richard S.
88.	Johnson, Abby
89.	Johnson, Norman
90.	Johnson, Patricia
91.	Jones, MD., Roy
92.	Joyce, Rick
93.	Kearns, Jim
94.	Kee, Ralph W.
95.	Kenevan, Kenneth
96.	Kien, Terry
97.	Knapp, Barbara
98.	Knapp, W. Mace
99.	Krieg, Joseph J.
100.	Kressner, Lowell
101.	Le Gate, Lawson
102.	Levin, John
103.	Lovinger, Mike
104.	Lovinger, Mike
105.	Maurer, Peter

Table 5-2

INDEX OF COMMENT LETTERS

Letter Number	Agency, Organization or Invididual
106.	Markeloff, R.
107.	Mauldon, Maria
108.	McWherter, Mike
109.	Megowan, Patrick
110.	Melts, Harry
111.	Melts, Harry
112.	Memmer, Michael
113.	Messenger, Thomas
114.	Mitas, Helen
115.	Mossman, Robert
116.	Norris, Frank
117.	O'Bryan, Dan
118.	Ormond, Lois
119.	Ornstein, Janice
120.	Otley, Ph.D. Kurt O.
121.	Paddock, David N.
122.	Parr, Becky
123.	Parr, D. Mark
124.	Peacock, P.M.
125.	Peacock, Tanya
126.	Pelech, Walter and Dorothy
127.	Perenot, Carla H.
128.	Polinar, Daryl
129.	Presutto, Anthony
130.	Price, Michael D.
131.	Pumphrey, Marilynne C.
132.*	Purinton, Beverley W. Purinton, Donald L.
133.	Raymond, C.E.
134.	Raz, Ron
135.*	Reimers, Eleanor Reimers, Norman
136.*	Riddle, Danny Riddle, Vikki
137.	Rinehart, Frank
138.*	Ritland, Christopher L. Ritland, Mary E.
139.	Roberts, Gene D.
140.	Robertson, Joseph M.
141.	Rodewald, Charles

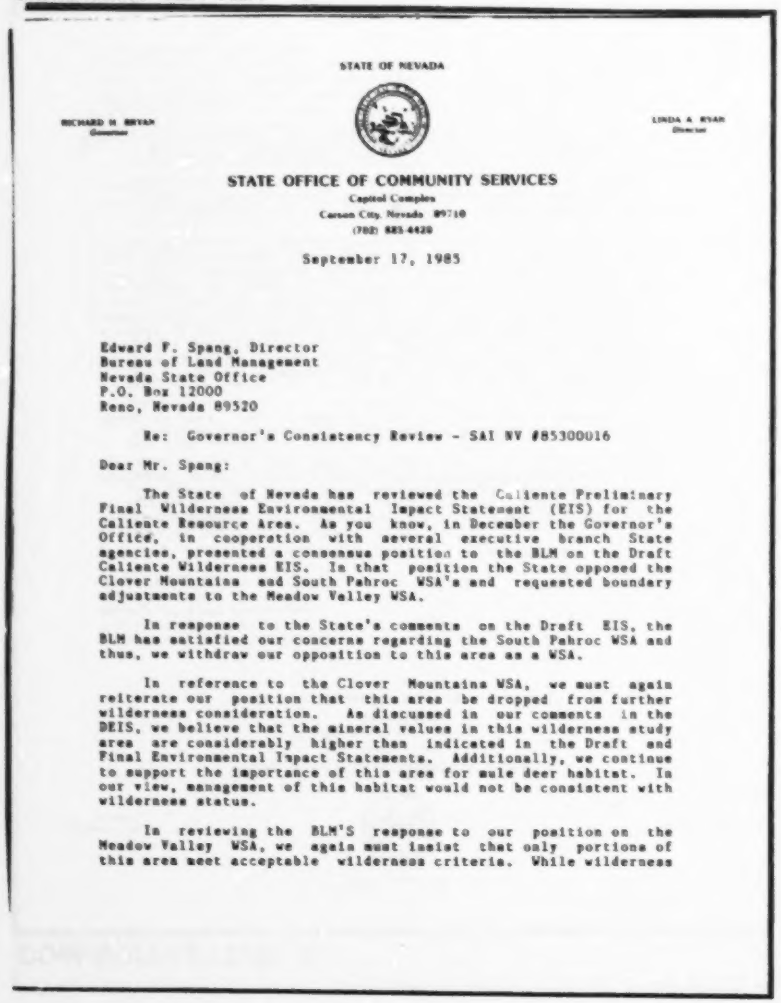
Table 5-2

INDEX OF COMMENT LETTERS

Letter Number	Agency, Organization or Invididual
142.	Ross, John
143.*	Sanders, Archable O'Neill Sanders, Catherine O. Sanders, Scott C.
144.	Scherb, Ben
145.	Schiller, Gregory T.
146.	Schindler, Jr., G.E.
147.	Schmelzer, Marcia
148.	Schnurmann, Erika
149.	Secord, Reed
150.	Shaw, Enid
151.	Siletz, Ari B.
152.	Smith, Rob
153.	Smith, Robert C.
154.	Soileau, Don
155.	Starratt, Betty F.
156.	Steinkellner, D. Marshall
157.	Steinkellner, Ralph
158.	Stevens, Jan
159.	Stifler, John
160.	Swanson, John R.
161.	Teague, Jonathan
162.	Tepke, Glen
163.	Thieret, Jeff
164.*	Thomas, Frank Thomas, Phyllis
165.*	Thompson, Barbara Thompson, Dan
166.	Tolfree, Robert
167.	Tree, Elissa
168.	Unwin, John
169.*	Valdez, Michael Lux, Melissa D.
170.	Von Ode, Hollie
171.	Wagner, Nick
172.	Walther, Eric G.
173.	Weaver, Steve and Kathie
174.	Welch, Dean
175.	Wilson, Richard C.
176.	Winter, Roger
177.*	Zeller, Robert O. Zeller, Ruth W.

*Denotes multiple signatures.

COMMENT LETTER 1



STATE OF NEVADA

RICHARD H. BRYAN
Governor

LINDA A. RYAN
Director

STATE OFFICE OF COMMUNITY SERVICES
Capitol Complex
Carson City, Nevada 89710
(702) 885-4420

September 17, 1985

Edward F. Spang, Director
Bureau of Land Management
Nevada State Office
P.O. Box 12000
Reno, Nevada 89520

Re: Governor's Consistency Review - SAI NV #85300016

Dear Mr. Spang:

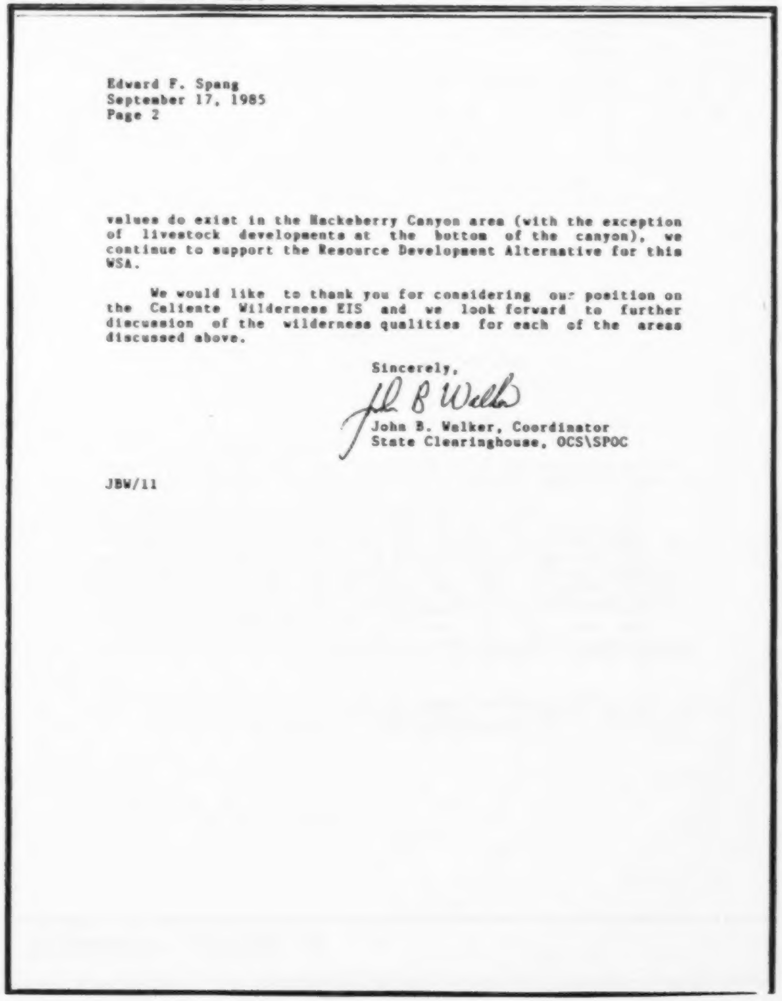
The State of Nevada has reviewed the Caliente Preliminary Final Wilderness Environmental Impact Statement (EIS) for the Caliente Resource Area. As you know, in December the Governor's Office, in cooperation with several executive branch State agencies, presented a consensus position to the BLM on the Draft Caliente Wilderness EIS. In that position the State opposed the Clover Mountains and South Pahroc WSA's and requested boundary adjustments to the Meadow Valley WSA.

In response to the State's comments on the Draft EIS, the BLM has satisfied our concerns regarding the South Pahroc WSA and thus, we withdraw our opposition to this area as a WSA.

In reference to the Clover Mountains WSA, we must again reiterate our position that this area be dropped from further wilderness consideration. As discussed in our comments in the DEIS, we believe that the mineral values in this wilderness study area are considerably higher than indicated in the Draft and Final Environmental Impact Statements. Additionally, we continue to support the importance of this area for mule deer habitat. In our view, management of this habitat would not be consistent with wilderness status.

In reviewing the BLM'S response to our position on the Meadow Valley WSA, we again must insist that only portions of this area meet acceptable wilderness criteria. While wilderness

COMMENT LETTER 1



Edward F. Spang
September 17, 1985
Page 2

values do exist in the Hackeberry Canyon area (with the exception of livestock developments at the bottom of the canyon), we continue to support the Resource Development Alternative for this WSA.

We would like to thank you for considering our position on the Caliente Wilderness EIS and we look forward to further discussion of the wilderness qualities for each of the areas discussed above.

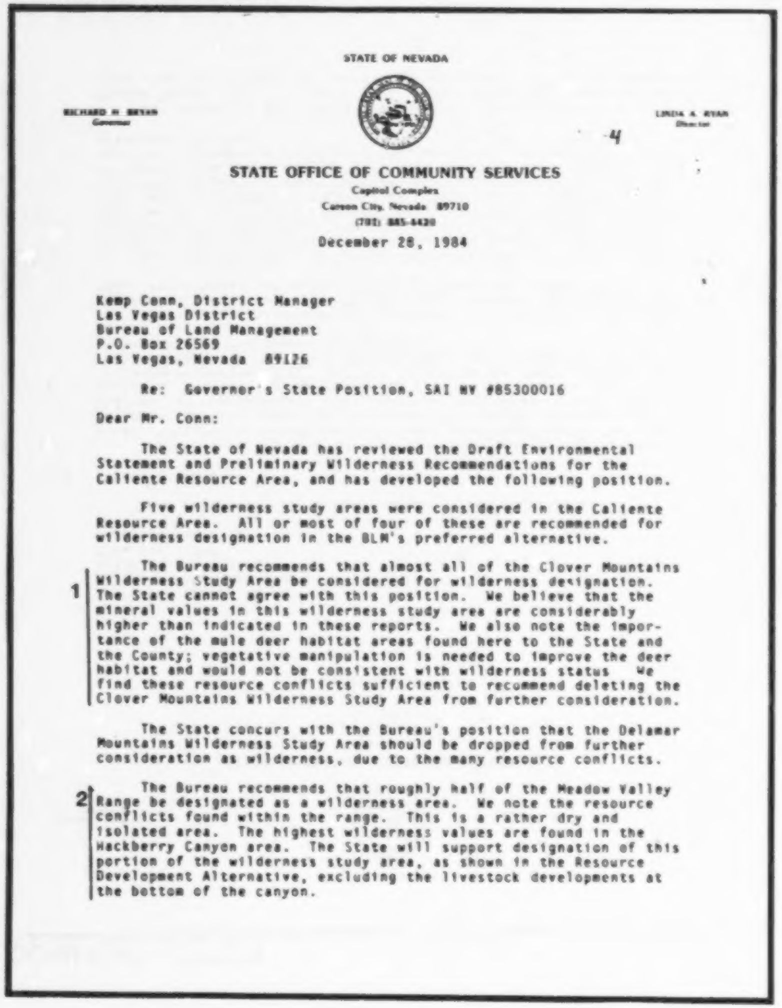
Sincerely,

John B. Walker

John B. Walker, Coordinator
State Clearinghouse, OCS\SPOC

JBW/11

COMMENT LETTER 2



STATE OF NEVADA

RICHARD H. BRYAN
Governor

LINDA A. RYAN
Director

4

STATE OFFICE OF COMMUNITY SERVICES
Capitol Complex
Carson City, Nevada 89710
(702) 885-4420

December 28, 1984

Kemp Conn, District Manager
Las Vegas District
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Re: Governor's State Position, SAI NV #85300016

Dear Mr. Conn:

The State of Nevada has reviewed the Draft Environmental Statement and Preliminary Wilderness Recommendations for the Caliente Resource Area, and has developed the following position.

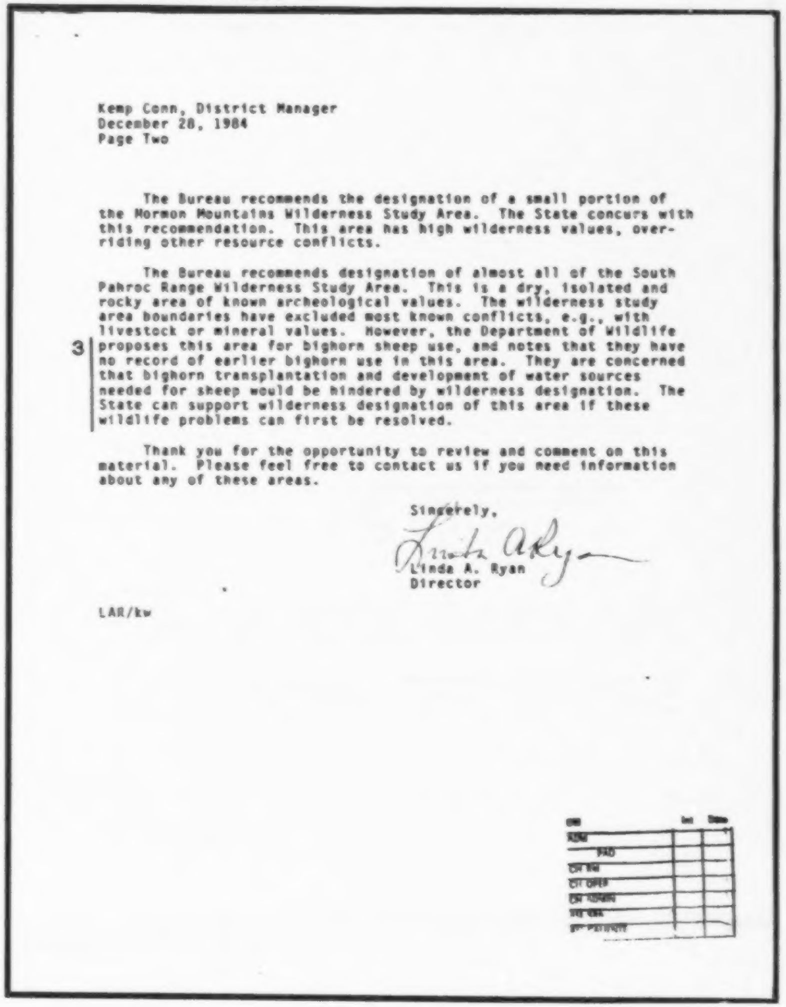
Five wilderness study areas were considered in the Caliente Resource Area. All or most of four of these are recommended for wilderness designation in the BLM's preferred alternative.

1 The Bureau recommends that almost all of the Clover Mountains Wilderness Study Area be considered for wilderness designation. The State cannot agree with this position. We believe that the mineral values in this wilderness study area are considerably higher than indicated in these reports. We also note the importance of the mule deer habitat areas found here to the State and the County; vegetative manipulation is needed to improve the deer habitat and would not be consistent with wilderness status We find these resource conflicts sufficient to recommend deleting the Clover Mountains Wilderness Study Area from further consideration.

The State concurs with the Bureau's position that the Delamar Mountains Wilderness Study Area should be dropped from further consideration as wilderness, due to the many resource conflicts.

2 The Bureau recommends that roughly half of the Meadow Valley Range be designated as a wilderness area. We note the resource conflicts found within the range. This is a rather dry and isolated area. The highest wilderness values are found in the Hackberry Canyon area. The State will support designation of this portion of the wilderness study area, as shown in the Resource Development Alternative, excluding the livestock developments at the bottom of the canyon.

COMMENT LETTER 2



Kemp Conn, District Manager
December 28, 1984
Page Two

The Bureau recommends the designation of a small portion of the Mormon Mountains Wilderness Study Area. The State concurs with this recommendation. This area has high wilderness values, overriding other resource conflicts.

3 The Bureau recommends designation of almost all of the South Pahroc Range Wilderness Study Area. This is a dry, isolated and rocky area of known archeological values. The wilderness study area boundaries have excluded most known conflicts, e.g., with livestock or mineral values. However, the Department of Wildlife proposes this area for bighorn sheep use, and notes that they have no record of earlier bighorn use in this area. They are concerned that bighorn transplantation and development of water sources needed for sheep would be hindered by wilderness designation. The State can support wilderness designation of this area if these wildlife problems can first be resolved.

Thank you for the opportunity to review and comment on this material. Please feel free to contact us if you need information about any of these areas.

Sincerely,

Linda A. Ryan

Linda A. Ryan
Director

LAR/kw

RESPONSE LETTER 2

Response to Letter 2

1. A mineral survey has been completed by the USGS/USBOM and its results will be utilized as this WSA moves further through the consideration process. This mineral study constitutes the latest and best available data and its preliminary indications are that mineral potential in the WSA remains limited. Our analysis of the potential increase in deer numbers due to vegetation conversion in the WSA indicates that under the Proposed Action, an opportunity to increase deer numbers in the area of the conversion,by ten percent would be foregone. The area identified as potentially available for vegetation manipulation is located primarily on steeper southerly facing slopes. These are not amenable to mechanical conversion practices and chemical methods are currently prohibited. Because of the physiographic and vegetation situation, burning would be difficult. Following burning, seeding with browse species not native to the area would be necessary to avoid a cheatgrass invasion. Seeding with non-native species would be prohibited in a designated wilderness. The opportunity loss in deer numbers is limited. For these reasons, it was decided that the area's wilderness values far outweighed the potential conflict with other resources and that the original recommendation should stand.

2. Substantial wilderness values exist, unencumbered by conflicts, in the main ridge area as indicated in the Proposed Action.

3. Bighorn sheep were historically present in this range and thus may, and have been, reintroduced. Because bighorn sheep have been adversely affected by past human activity, properly planned, designed and located water developments which are compatible with designated wilderness can be installed (Wilderness Management Policy, III.D.2).

COMMENT LETTER 3

United States Department of the Interior
BUREAU OF MINES
WESTERN FIELD OPERATIONS CENTER
EAST 360 3RD AVENUE
SPOKANE, WASHINGTON 99202

December 27, 1984

Memorandum

To: Kemp Conn, District Manager--Bureau of Land Management
Las Vegas, Nevada
ATTENTION: Caliente Wilderness DEIS Team Leader

From: Supervisor--Minerals Involvement Section

Subject: Draft Caliente Wilderness Environmental Impact Statement (DEIS)
Southern Lincoln and Northeastern Clark Counties, Nevada

We have reviewed the Caliente Wilderness DEIS which contains an excellent evaluation of mineral resources within the five wilderness study areas of the report. The assessment of adverse and beneficial effects of the five alternative plans on mineral resources seems to be excellent and accurate. 1 Although numerous mines, prospects, claims, and their related geologic formations occur in these study areas, certain modest boundary adjustments could eliminate most of the potential conflict between mineral resource and wilderness values. First, the boundaries of the Clover Mountains, Meadow Valley Range, and South Pahroc Range study areas should be modified as shown on the enclosed maps. Second, the Mormon Mountains study area should not be recommended for wilderness.

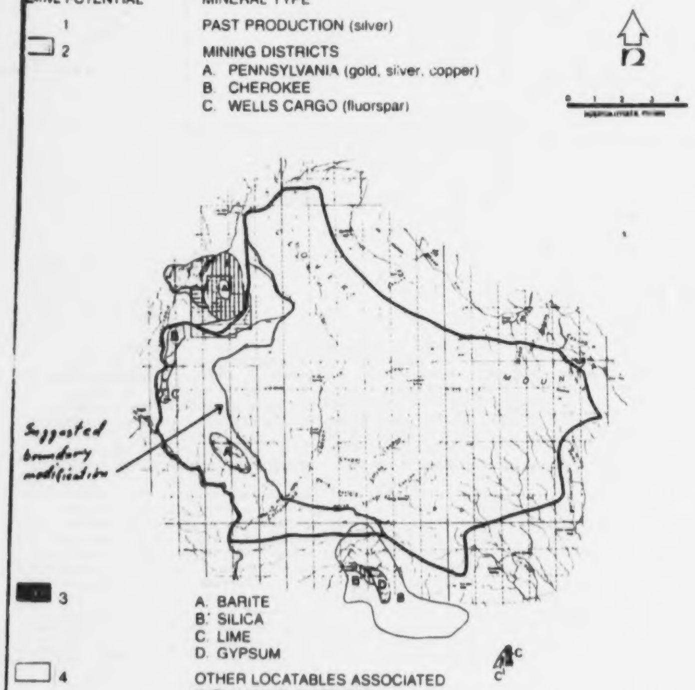
Thank you for the opportunity to comment on your environmental impact statement.

D'Arcy P. Banister

Enclosures

COMMENT LETTER 3

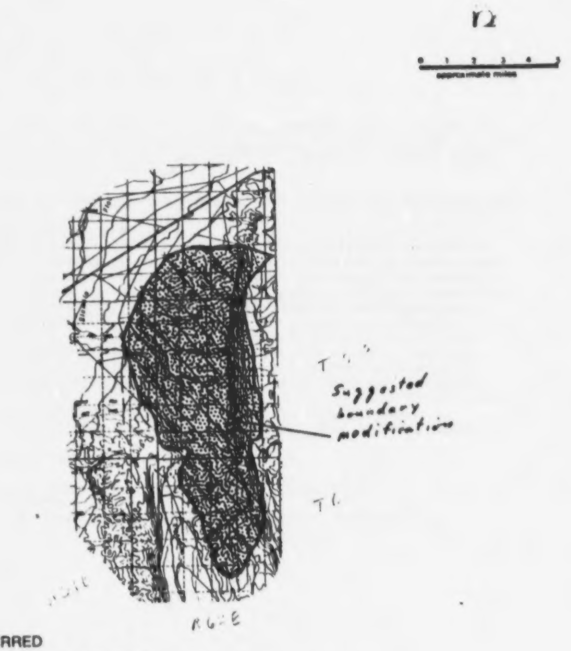
ATIVE POTENTIAL	MINERAL TYPE *
1	PAST PRODUCTION (silver)
☐ 2	MINING DISTRICTS A. PENNSYLVANIA (gold, silver, copper) B. CHEROKEE C. WELLS CARGO (fluorspar)
■ 3	A. BARITE B. SILICA C. LIME D. GYPSUM
☐ 4	OTHER LOCATABLES ASSOCIATED WITH MINING DISTRICTS A. PENNSYLVANIA B. CHEROKEE/VIOLA (gold, silver, copper, lead, mercury)
5	OTHER LOCATABLES (in all areas)
▤	MINING CLAIM GROUP OVERLAPPING WSA


0 1 2 3 4
approximate miles
Suggested boundary modification

LOCATABLE MINERAL POTENTIA
MINING CLAIM
CLOVER MTNS. NV-050-01

*REFER TO TEXT FOR EXPLANATION

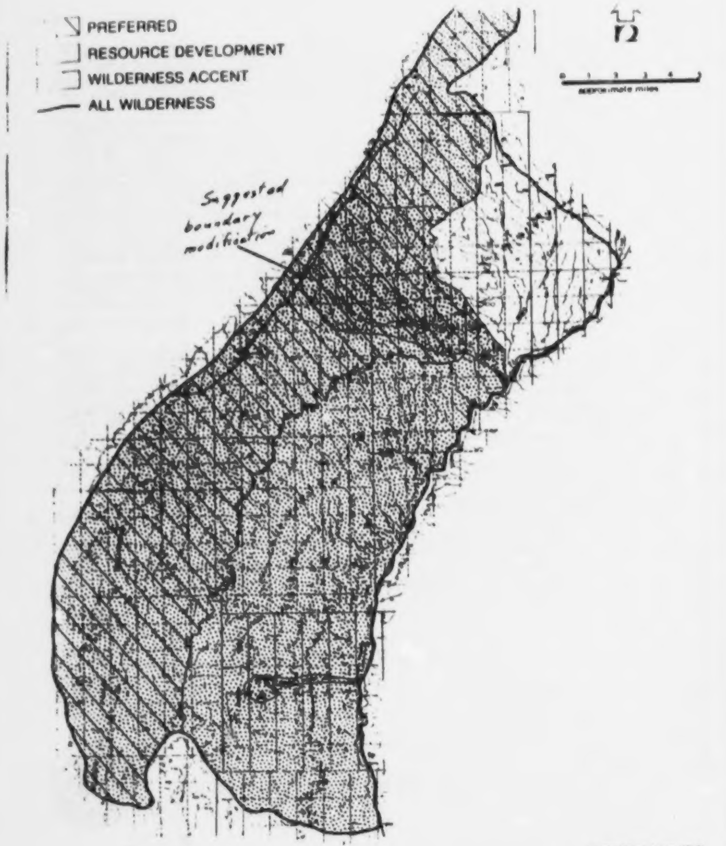
COMMENT LETTER 3


0 1 2 3 4 5
approximate miles
Suggested boundary modification

- ▧ PREFERRED
- ☐ RESOURCE DEVELOPMENT
- ▒ WILDERNESS ACCENT (SAME AS ALL WILDERNESS)
- — ALL WILDERNESS

ALTERNATIVES
SOUTH PAHROC RANGE NV-050-0132

COMMENT LETTER 3


PREFERRED
RESOURCE DEVELOPMENT
WILDERNESS ACCENT
ALL WILDERNESS
Suggested boundary modification
0 1 2 3 4 5
approximate miles

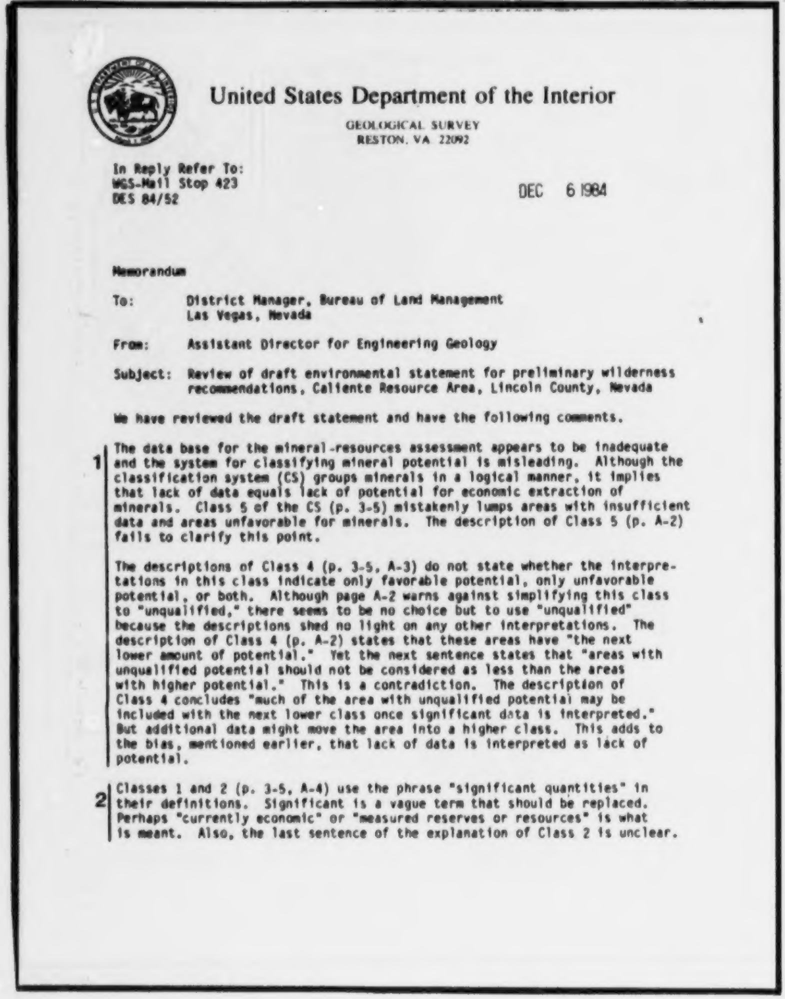
ALTERNATIVES
MEADOW VALLEY RANGE NV-050-0156

RESPONSE LETTER 3

Response to Letter 3

1. Thank you for your comments. We have evaluated all of the available mineral data including the completed and/or draft USGS/USBOM reports. In so doing, we balanced mineral potential against other resource values and the Proposed Action represents the result of that process. Your information will be incorporated into the Wilderness Study Report which will be forwarded to Congress. Congress will make the final decision to designate all, part or none of these areas as Wilderness.

COMMENT LETTER 4



United States Department of the Interior
GEOLOGICAL SURVEY
RESTON, VA 22092

In Reply Refer To:
WGS-Mail Stop 423
DES 84/52

DEC 6 1984

Memorandum

To: District Manager, Bureau of Land Management
Las Vegas, Nevada

From: Assistant Director for Engineering Geology

Subject: Review of draft environmental statement for preliminary wilderness recommendations, Caliente Resource Area, Lincoln County, Nevada

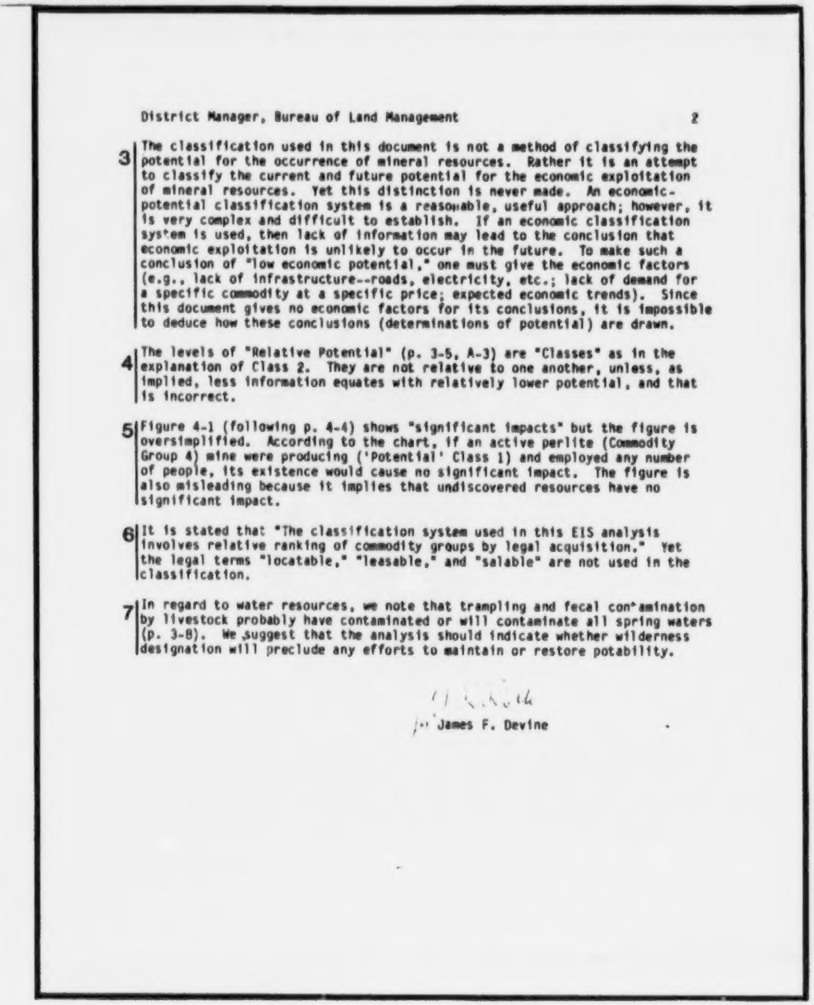
We have reviewed the draft statement and have the following comments.

1 The data base for the mineral-resources assessment appears to be inadequate and the system for classifying mineral potential is misleading. Although the classification system (CS) groups minerals in a logical manner, it implies that lack of data equals lack of potential for economic extraction of minerals. Class 5 of the CS (p. 3-5) mistakenly lumps areas with insufficient data and areas unfavorable for minerals. The description of Class 5 (p. A-2) fails to clarify this point.

The descriptions of Class 4 (p. 3-5, A-3) do not state whether the interpretations in this class indicate only favorable potential, only unfavorable potential, or both. Although page A-2 warns against simplifying this class to "unqualified," there seems to be no choice but to use "unqualified" because the descriptions shed no light on any other interpretations. The description of Class 4 (p. A-2) states that these areas have "the next lower amount of potential." Yet the next sentence states that "areas with unqualified potential should not be considered as less than the areas with higher potential." This is a contradiction. The description of Class 4 concludes "much of the area with unqualified potential may be included with the next lower class once significant data is interpreted." But additional data might move the area into a higher class. This adds to the bias, mentioned earlier, that lack of data is interpreted as lack of potential.

2 Classes 1 and 2 (p. 3-5, A-4) use the phrase "significant quantities" in their definitions. Significant is a vague term that should be replaced. Perhaps "currently economic" or "measured reserves or resources" is what is meant. Also, the last sentence of the explanation of Class 2 is unclear.

COMMENT LETTER 4



3 The classification used in this document is not a method of classifying the potential for the occurrence of mineral resources. Rather it is an attempt to classify the current and future potential for the economic exploitation of mineral resources. Yet this distinction is never made. An economic-potential classification system is a reasonable, useful approach; however, it is very complex and difficult to establish. If an economic classification system is used, then lack of information may lead to the conclusion that economic exploitation is unlikely to occur in the future. To make such a conclusion of "low economic potential," one must give the economic factors (e.g., lack of infrastructure--roads, electricity, etc.; lack of demand for a specific commodity at a specific price; expected economic trends). Since this document gives no economic factors for its conclusions, it is impossible to deduce how these conclusions (determinations of potential) are drawn.

4 The levels of "Relative Potential" (p. 3-5, A-3) are "Classes" as in the explanation of Class 2. They are not relative to one another, unless, as implied, less information equates with relatively lower potential, and that is incorrect.

5 Figure 4-1 (following p. 4-4) shows "significant impacts" but the figure is oversimplified. According to the chart, if an active perlite (Commodity Group 4) mine were producing ('Potential' Class 1) and employed any number of people, its existence would cause no significant impact. The figure is also misleading because it implies that undiscovered resources have no significant impact.

6 It is stated that "The classification system used in this EIS analysis involves relative ranking of commodity groups by legal acquisition." Yet the legal terms "locatable," "leasable," and "salable" are not used in the classification.

7 In regard to water resources, we note that trampling and fecal contamination by livestock probably have contaminated or will contaminate all spring waters (p. 3-8). We suggest that the analysis should indicate whether wilderness designation will preclude any efforts to maintain or restore potability.

James F. Devine

RESPONSE LETTER 4

Response to Letter 4

1. The classification system was structured based on the data available at the time of writing the DEIS with the knowledge that its shortcomings would be rectified in the FEIS when newer studies became available. Newer data, including USGS's geochemical studies, have been completed and analyzed. Appropriate changes have been made. Classes 4 and 5 from the DEIS have been dropped as planned and a new Class 4 described which indicates lowered or no potential based on newer data (Appendix Tables 3-1 and 3-2).

2. Your terminology is taken from the McKelvey classification system which we are not using in this analysis. The last sentence of Class 2 has been rewritten (Appendix Table 3-2).

3. The term "significant quantities: was used because a broader measure than "currently economic" was desired. The latter term could exclude a large quantity of material of slightly lower than currently economic concentration for example, while the former term would include it, while excluding areas with trace amounts or small pockets of high concentration.

4. This table has been rewritten.

5. Figure 4-2 analyzes the significance of impacts to the nation's mineral supply availability. The loss of a perlite mine would not be significant in that sense, since it is abundant elsewhere. The significance of such a loss might well be felt in the local economy and would be identified as a social or economic effect.

   Based upon favorable information, undiscovered resources are highly speculative as to actual occurrence, specific location and economic viability, and do not warrant being flagged as a "significant impact" considering the high degree of uncertainty involved.

6. Rewritten to clarify (App. A).

7. Efforts to restore potability would not be precluded by wilderness designation and this has been clearly identified in the document as rewritten.

COMMENT LETTER 5

United States Department of the Interior
NATIONAL PARK SERVICE
WESTERN REGION
450 GOLDEN GATE AVENUE BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:
L7619 (WR-RPE)

November 30, 1984

Memorandum

To: District Manager, Bureau of Land Management, Las Vegas

From: ACTING Regional Director, Western Region

Subject: Caliente Draft Wilderness Environmental Impact Statement, DES-84/52

In accordance with the State Director, Bureau of Land Management, Nevada's letter of September 26, 1984, we have reviewed the subject document and have the following comments.

1 1) Page 2, Number 5: We recommend that this sentence be reworded as follows:

"Limiting motorized access reduces opportunities for looting and vandalism; thus, wilderness designation offers greater protection for both known and undiscovered archeological and historical resources."

2) Page 4: Why excavate sites in a wilderness area except for pure research? What site stabilization problems are foreseen in a wilderness area vis-a-vis limited access and limited funding for stabilization even on lands which are generally open to the public for recreational and other commercial uses? (See also pages 9, 16, 24, 37 etc., for similar statements).

3) Page 6: The statement: "Components of known sites include open litic scatters, rock shelters, temporary camp sites and milling sites" should be rephrased. These are known site types not components.

2 4) Page 3-2: Is the survey being referred to the Rusco and Munoz 1983 entry in the bibliography? Also, the Class I (1978) cultural resources inventory does not appear in the bibliography.

COMMENT LETTER 5

3 5) Page 4-2: Standard Operating Procedures (Item 5)

This listing of regulations does not spell out the procedures or what the compliance process actually consists of. What will be done, when, etc.? Has consultation with the SHPO been started, etc.?

4 6) Pages 4-10 and 4-11: The entire section on cultural resource is poorly written, confusing, and ambiguous, i.e., the sentence: "Impacts to cultural resources....will be both beneficial and potentially adverse and will be offsetting."

The succeeding sentence "Adverse impacts will result from some increase in primitive recreational use and associated increase in vandalism and inadvertent damage to cultural resources..." is contradictory to statements in the Caliente supplemenary technical report (i.e., page 9) which states that the blocking of motorized access to the WSA will reduce opportunities for looting and vandalism (and hence beneficial).

5 The paragraph continues: "Adverse impacts will also occur due to much higher costs of intensive inventory and recordation in a wilderness area." With limited funding for cultural resources, why does the WSA get a priority for survey and recordation? If so, why not do project specific inventories, and general surveys prior to designation as a WSA? It is not clear how inventory/recordation costs constitute a direct adverse impact to an archeological site in a wilderness area where public access is severely restricted and greater monitoring is to be provided (see paragraph 2, same page).

The paragraph also states that deterioration of sites will occur since management will not normally include site stabilization (see Item 2, this letter). Does site stabilization take a priority in a limited access WSA when few stabilization funds are available and such funds are insufficient to cover stabilization needs on BLM lands in non-WSA areas.

COMMENT LETTER 5

The concluding two paragraphs on cultural resources contain similar problems and ambiguities/contradictions.

We appreciate the opportunity to review your draft statement.

W. Russell White

cc:
WASO (762)
IAS

RESPONSE LETTER 5

Response to Letter 5

1. Your Items 1, 2, and 3 refer to the Technical Report which is in final form and was intended for your use as supplementary information. The theme regarding additional protection for cultural resources in designated wilderness areas has been carried through the FEIS. Site excavation in wilderness areas would only occur for pure research, but would be potentially more difficult due to wilderness restrictions. No stabilization is proposed or foreseen.
2. Yes. The citation has been added to text and references for both.
3. The entire section on standard operating procedures has been deleted during rewriting of the document. The SHPO has reviewed and commented upon the EIS.
4. The entire sections relative to cultural resources have been rewritten or deleted, as appropriate.
5. The entire sections relative to cultural resources have been rewritten or deleted, as appropriate. WSAs do not gain priority funding for survey and recordation. Priorities are set by project proposals and for highly productive cultural resource areas such as the Mormon Mountains. As stated, stabilization is not normally permitted, but can be allowed on a case-by-case basis. WSA status confers no priority for such work. Rather, it renders sites as more likely to remain subject to the vagaries of nature.

COMMENT LETTER 6

DEPARTMENT OF THE AIR FORCE
REGIONAL CIVIL ENGINEER, WESTERN REGION (AFESC)
630 SANSOME STREET - ROOM 1216
SAN FRANCISCO, CALIFORNIA 94111

JAN 02 1985

ROV (Cameron/556-6439)

Caliente Wilderness DEIS Team

Mr. Kemp Conn
District Manager
ATTN: Caliente Wilderness DEIS Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89128

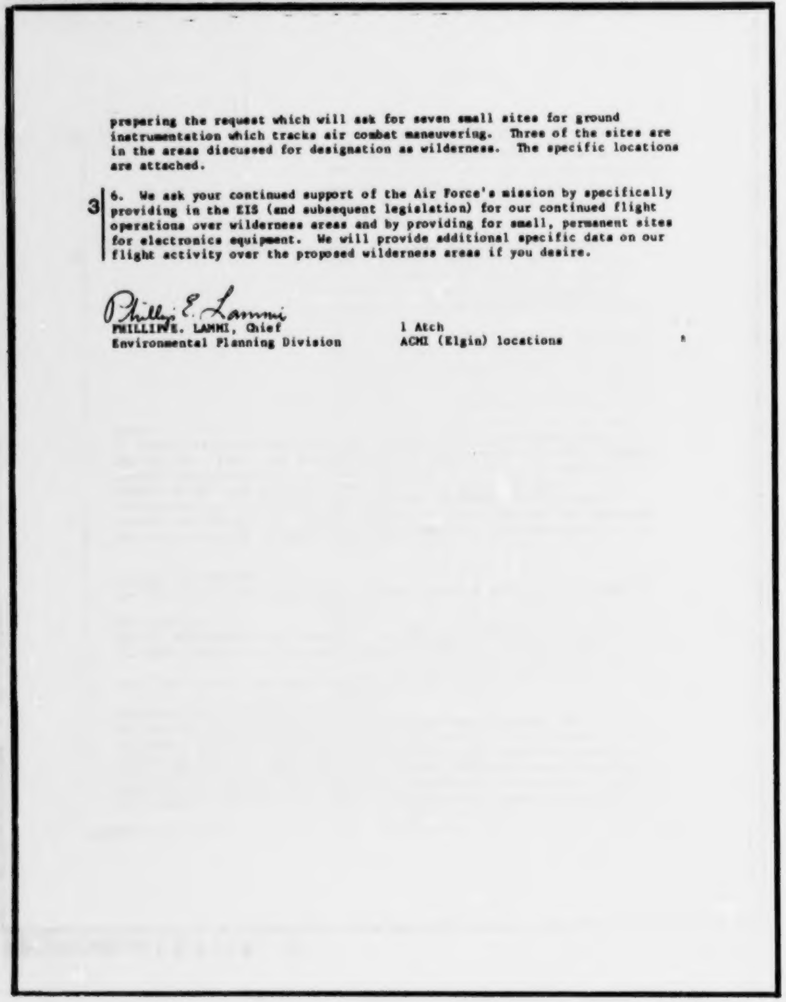
1. We appreciate your invitation to comment on the Draft Caliente Wilderness Environmental Impact Statement (DEIS). The Air Force supports the wilderness designation program and strongly desires that designation of appropriate areas proceed. We believe, however, that the proposed action does have the potential to impact the Air Force's ability to operate and train in the Nellis Air Force Range.

1 2. In the past, the Air Force has located training areas away from population centers in order to minimize disturbances to the public. Our activity over the Nellis Range and in the Desert Military Operations Area (MOA) is invaluable to the Air Force because the essential training that is conducted there is relatively isolated from conflicts with other public uses. We are concerned that the continued operation of military aircraft on the Nellis Air Force Range and the adjacent Desert MOA is not adequately described.

3. For many years, military aircrews have regularly trained over the land now proposed for designation as wilderness. The Air Force has a critical need for airspace where we can fly low and at supersonic speeds. The location of the existing Nellis Range and airspace, the shortage of alternatives, and the investment at Nellis AFB limit our alternatives for relocating the training conducted in the Caliente area.

2 4. We also have a continuing requirement for siting and operating small ground electronics stations which simulate the electronic warfare tacatics and equipment that the Air Force expects to fight against, and also small electronic installations which track our aircraft during air combat maneuvering over the range.

5. In order to carry out our mission, we must, in cooperation with the Department of the Interior, continue to use the restricted airspace and military operating areas as they are charted and agreed with the Federal Aviation Administration. It should be noted that the Air Force must oppose proposed alternatives that would obstruct our continued use of the Nellis Range airspace including the Desert MOA. In addition, we desire that small unattended sites be allowed within the wilderness areas; we are presently

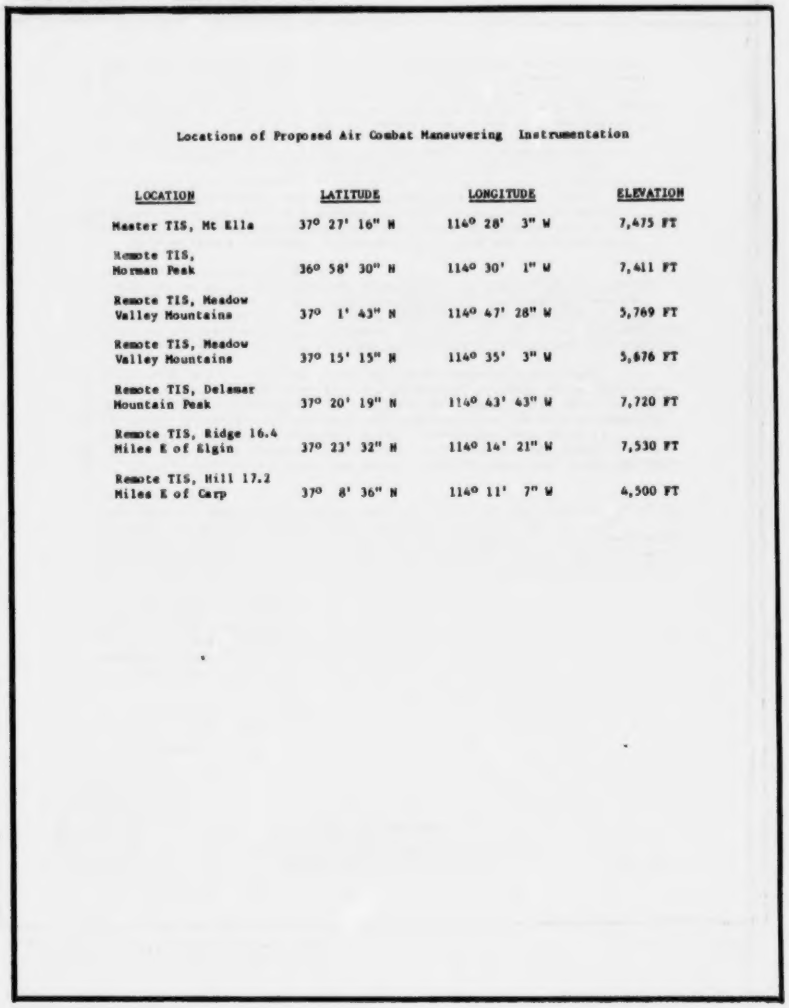


preparing the request which will ask for seven small sites for ground instrumentation which tracks air combat maneuvering. Three of the sites are in the areas discussed for designation as wilderness. The specific locations are attached.

3 6. We ask your continued support of the Air Force's mission by specifically providing in the EIS (and subsequent legislation) for our continued flight operations over wilderness areas and by providing for small, permanent sites for electronics equipment. We will provide additional specific data on our flight activity over the proposed wilderness areas if you desire.

Phillip E. Lammi
PHILLIP E. LAMMI, Chief
Environmental Planning Division

1 Atch
ACMI (Elgin) locations



Locations of Proposed Air Combat Maneuvering Instrumentation

LOCATION	LATITUDE	LONGITUDE	ELEVATION
Master TIS, Mt Ella	37° 27' 16" N	114° 28' 3" W	7,475 FT
Remote TIS, Norman Peak	36° 58' 30" N	114° 30' 1" W	7,411 FT
Remote TIS, Meadow Valley Mountains	37° 1' 43" N	114° 47' 28" W	5,769 FT
Remote TIS, Meadow Valley Mountains	37° 15' 15" N	114° 35' 3" W	5,676 FT
Remote TIS, Delamar Mountain Peak	37° 20' 19" N	114° 43' 43" W	7,720 FT
Remote TIS, Ridge 16.4 Miles E of Elgin	37° 23' 32" N	114° 14' 21" W	7,530 FT
Remote TIS, Hill 17.2 Miles E of Carp	37° 8' 36" N	114° 11' 7" W	4,500 FT

RESPONSE LETTER 6

Response to Letter 6

1. The Bureau's Wilderness Management Policy states that "There is no specific prohibition of overflight of wilderness by aircraft". Low overflight is discouraged except for "essential military missions". A discussion of military overflights now appears in Chapter 5.

2. No alternative analyzed in this EIS proposes to stop currently used airspace. The small electronic sites mentioned were accommodated in areas outside of WSAs.

3. The purpose of an EIS is analysis of environmental impacts and identification of mitigating measures, not support of various proposals. Your letter and our added references to your requests in this document serve as notice to Congress of your concerns. BLM policy does not permit seeking special legislative exemptions for activities in wilderness areas.

COMMENT LETTER 7

Department of Energy
Western Area Power Administration
Boulder City Area Office
P O Box 200
Boulder City, NV 89005

JAN 7 1985

Refer to: G1010

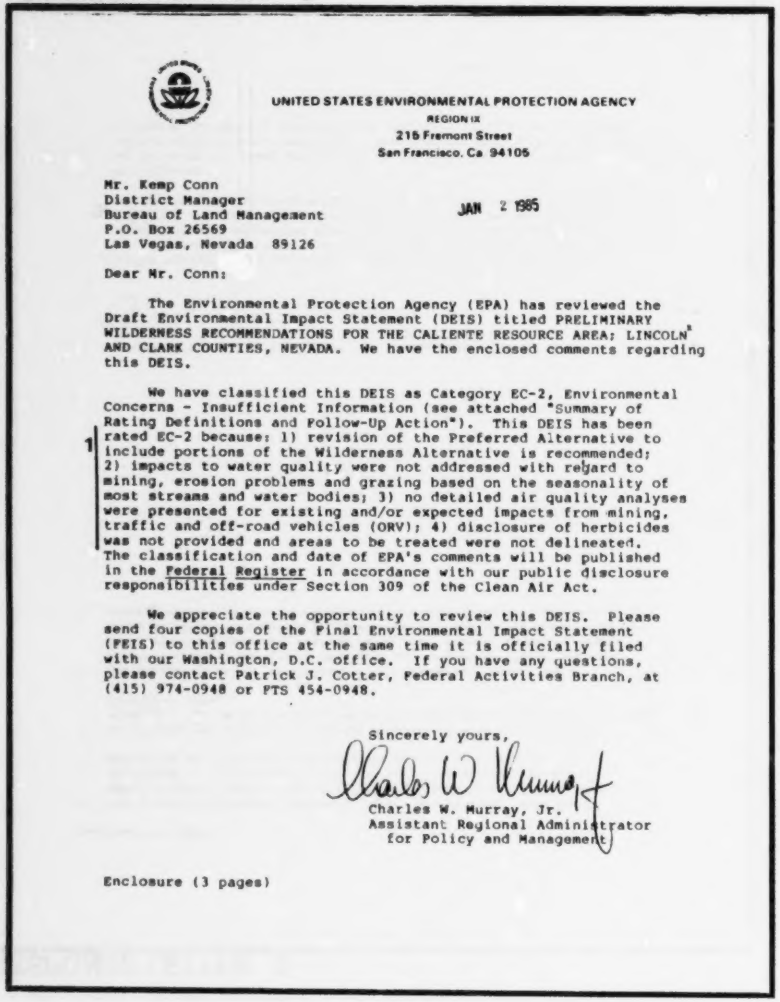
Mr. Kemp Conn
District Manager
Bureau of Land Management
ATTN: Mr. Frank Maxwell
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Mr. Conn:

We appreciate the opportunity to review the draft Caliente Wilderness Environmental Impact Statement. We find the document well written. Thanks should go to Mr. Frank Maxwell for his coordination. Our emphasis is on WSA 050-177 Delamar Mountains. Planned transmission lines using the corridor adjacent to Delamar Mountains would be greatly restricted if full Wilderness Status is designated. We support the preferred alternative for this WSA.

Sincerely,

G. J. Giles
Assistant Area Manager
for Management Services



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca 94105

JAN 2 1985

Mr. Kemp Conn
District Manager
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Mr. Conn:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) titled PRELIMINARY WILDERNESS RECOMMENDATIONS FOR THE CALIENTE RESOURCE AREA; LINCOLN AND CLARK COUNTIES, NEVADA. We have the enclosed comments regarding this DEIS.

We have classified this DEIS as Category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of Rating Definitions and Follow-Up Action"). This DEIS has been 1 rated EC-2 because: 1) revision of the Preferred Alternative to include portions of the Wilderness Alternative is recommended; 2) impacts to water quality were not addressed with regard to mining, erosion problems and grazing based on the seasonality of most streams and water bodies; 3) no detailed air quality analyses were presented for existing and/or expected impacts from mining, traffic and off-road vehicles (ORV); 4) disclosure of herbicides was not provided and areas to be treated were not delineated. The classification and date of EPA's comments will be published in the Federal Register in accordance with our public disclosure responsibilities under Section 309 of the Clean Air Act.

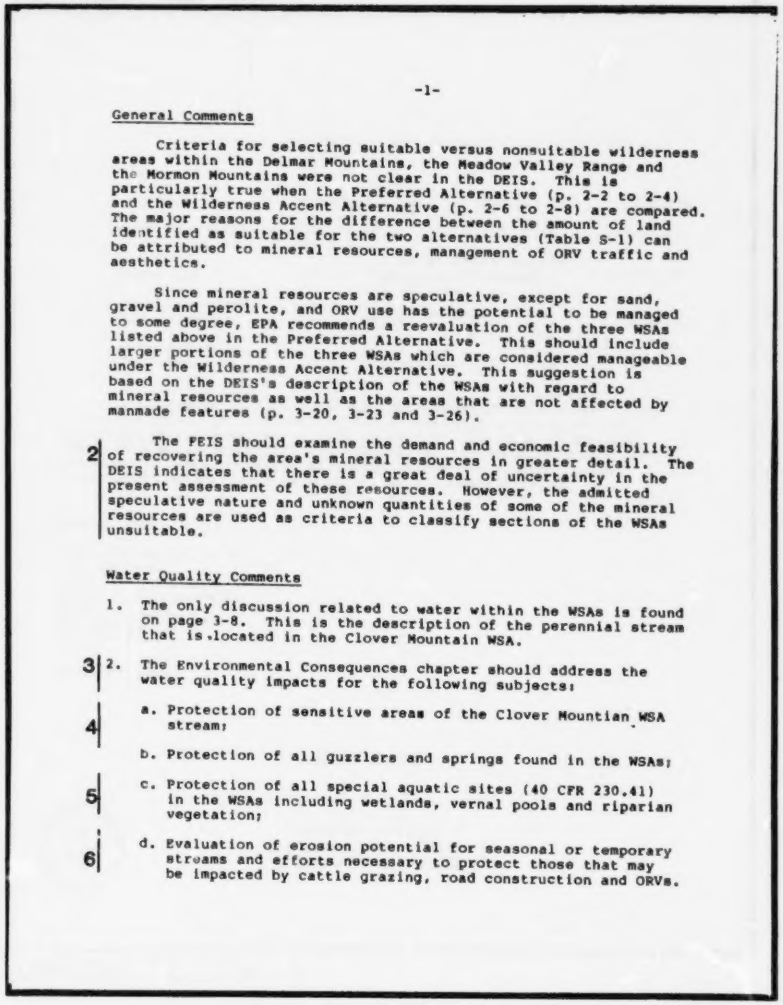
We appreciate the opportunity to review this DEIS. Please send four copies of the Final Environmental Impact Statement (FEIS) to this office at the same time it is officially filed with our Washington, D.C. office. If you have any questions, please contact Patrick J. Cotter, Federal Activities Branch, at (415) 974-0948 or FTS 454-0948.

Sincerely yours,

Charles W. Murray, Jr.

Charles W. Murray, Jr.
Assistant Regional Administrator
for Policy and Management

Enclosure (3 pages)



-1-

General Comments

Criteria for selecting suitable versus nonsuitable wilderness areas within the Delmar Mountains, the Meadow Valley Range and the Mormon Mountains were not clear in the DEIS. This is particularly true when the Preferred Alternative (p. 2-2 to 2-4) and the Wilderness Accent Alternative (p. 2-6 to 2-8) are compared. The major reasons for the difference between the amount of land identified as suitable for the two alternatives (Table S-1) can be attributed to mineral resources, management of ORV traffic and aesthetics.

Since mineral resources are speculative, except for sand, gravel and perolite, and ORV use has the potential to be managed to some degree, EPA recommends a reevaluation of the three WSAs listed above in the Preferred Alternative. This should include larger portions of the three WSAs which are considered manageable under the Wilderness Accent Alternative. This suggestion is based on the DEIS's description of the WSAs with regard to mineral resources as well as the areas that are not affected by manmade features (p. 3-20, 3-23 and 3-26).

2 The FEIS should examine the demand and economic feasibility of recovering the area's mineral resources in greater detail. The DEIS indicates that there is a great deal of uncertainty in the present assessment of these resources. However, the admitted speculative nature and unknown quantities of some of the mineral resources are used as criteria to classify sections of the WSAs unsuitable.

Water Quality Comments

1. The only discussion related to water within the WSAs is found on page 3-8. This is the description of the perennial stream that is located in the Clover Mountain WSA.

3 2. The Environmental Consequences chapter should address the water quality impacts for the following subjects:

4 a. Protection of sensitive areas of the Clover Mountian WSA stream;

b. Protection of all guzzlers and springs found in the WSAs;

5 c. Protection of all special aquatic sites (40 CFR 230.41) in the WSAs including wetlands, vernal pools and riparian vegetation;

6 d. Evaluation of erosion potential for seasonal or temporary streams and efforts necessary to protect those that may be impacted by cattle grazing, road construction and ORVs.

COMMENT LETTER 8

-2-

3. The FEIS [redacted]ning activities may impact surface water quality, either permanent or seasonal water bodies, and underground aquifers in the vicinity.

4. [redacted]appropriate mitigation for those areas that will have significant impacts on water quality.

Air Quality Comments

1. Our scoping letter, dated April 13, 1983, recommended that the DEIS:

   a. [redacted]quality conditions [redacted] Ambient Air Quality Standards;

   b. I[redacted] to air quality for any alternatives, including recovery of minerals and petroleum products and increased uses of ORVs in the WSA;

   c. D[redacted] measures that will be implemented to pr[redacted] air quality of the area.

2. The DEIS did not address any of these points except for brief statements on pages 3-1, 3-2, 4-7, 5-1 and 5-3. The above issues must be dealt with in greater detail in the FEIS.

Pesticides Comments

1. Th[redacted] should state wh[redacted] control (p. 4-3).

2. Any herbicides used must be registered with the Environmental Protection Agency and the appropriate State agency. All applicable State regulations, label directions and instructions must be followed. In addition, because the regulatory status of chemicals is constantly changing, EPA recommends that a periodic review of the chemical's current regulatory status be made prior to application.

3. [redacted], EPA recomm[redacted] section of the FEIS be devoted to the subject including [redacted]ication rates, application procedures and areas to be [redacted]ated.

COMMENT LETTER 8

SUMMARY OF RATING DEFINITIONS AND FOLLOW-UP ACTION*

Environmental Impact of the Action

LO—Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1—Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From: EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment

Response to Letter 8

1. The BLM has carefully reconsidered the Proposed Action and has changed the recommendations where warranted. Water quality has been made an issue and has been addressed in one WSA where it is present at the surface and it may be affected through the greater protection from surface-disturbing activities afforded by wilderness status.

   Consultation with state air quality staff indicated that in no instance did land designation such as park or wilderness status result in a change in air quality standards. A proposed and an existing power plant may affect the air quality in two WSAs. No proposals exist for any WSA under any alternatives that would substantially affect air quality.

   No use of herbicides has been proposed and the BLM is currently under court restraint in Region IX relative to the use of herbicides. Some vegetation conversion has been proposed for two WSAs, but burning would probably be used to accomplish it.

   With any new proposal or action in the future will come site-or-project-specific environmental analysis. This would include air and/or water quality effects and mitigation measures, if appropriate.

2. The Wilderness Accent alternative was arrived at by tilting towards wilderness when conflicts with other resources were minor or non-existent. The Proposed Action (Preferred Alternative) considered resource conflicts as well as alternative management objectives for the lands involved.

3. The recommendation for these three WSAs reconsidered, and the Wilderness Accent Alternative was chosen as the new Proposed Action for the Mormon Mountains WSA. It was decided that the initial recommendation would remain for the other two WSAs.

4. Mineral conflict becomes an actual discriminator only in two instances where the mineral values were proven or supported by strong evidence, e.g., the operating perlite mine's associated claims in the South Pahroc Range WSA, and the area adjacent to the Pennsylvania Mining District in the Clover Mountains WSA. In areas where mineral values were more speculative, such as the mining claims on the southwestern bajada of the Mormon Mountains, mineral conflicts were used as a discriminator only when conjoined with other resource conflicts or low wilderness values.

5. The present impact on the water quality in the streams in the Clover Mountains comes from domestic livestock and wild horse grazing. Wilderness designation or nondesignation will not affect either of these sources. Guzzlers are artificial catchment and storage facilities and protection is part of the design and maintenance of the facility. Livestock exclosure fences are proposed for some of the springs in the Clover Mountains WSA. An exclosure has been constructed at Quaking Aspen Spring to protect the source and the aspen, but these actions are independent of the area's wilderness status. There are no wetlands present. Flow in lower Cottonwood Creek becomes intermittent and forms pools. Riparian vegetation around spring sources and along the creeks will be protected through management of grazing, independently of

   wilderness status or management. Methods utilized include exclosure fences, pasture fencing and changes in grazing systems. Protection of streamside riparian vegetation will also result in protection of running water and pool sections as well.

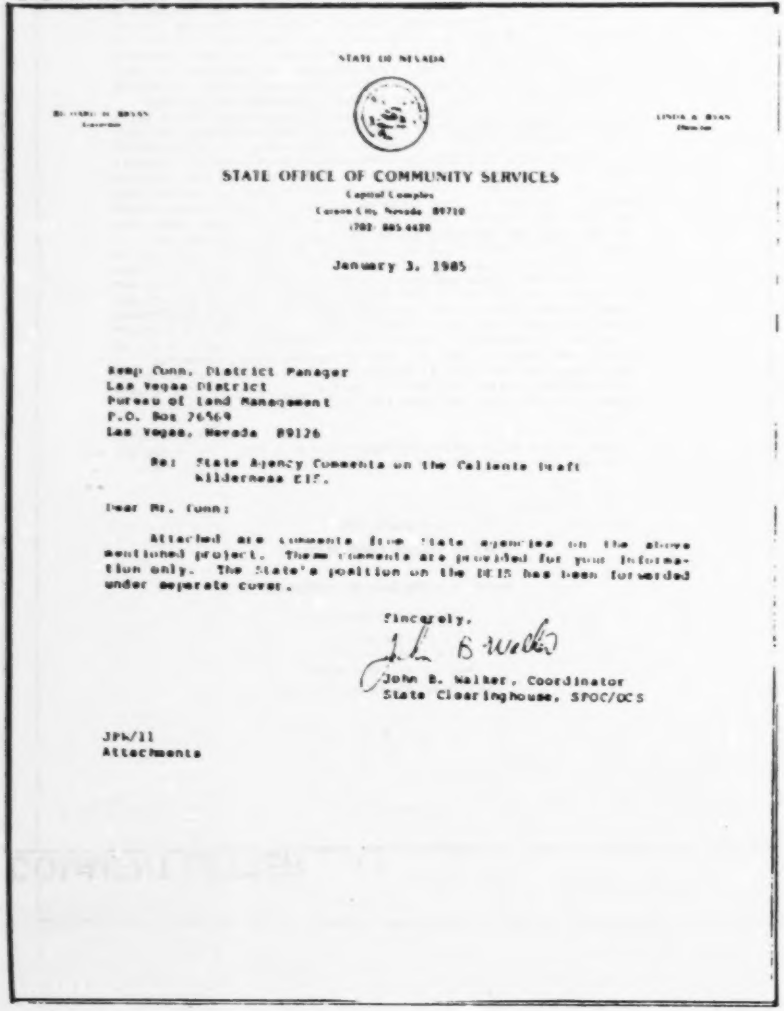
   Studies of this stream system have been commenced to determine erosion potential and management needs. It is anticipated that the system will be found to be a critical watershed. Plans will be developed, if necessary, to effect rehabilitatation, probably concentrating on riparian vegetation. Again, these studies and measures will be undertaken irrespective of the WSA's wilderness status but consistent with the need to preserve its wilderness values.

   Areas where mining exploration may occur are identified, but no mine development within the WSA is expected. Potential effects on surface water quality are discussed. With little information available relative to groundwater resources, it would be impossible to determine potential effects on them. It is likely, though, that any effects would be limited to the local aquifers.

6. Air quality is currently meeting Class II or better standards. No petroleum recovery is anticipated and mineral development will consist of a perlite mine, most of which is underground, and sand and gravel pit operations. The perlite mine will not affect air quality and the sand and gravel pit operations will cause intermittent localized increases in particulates, but no regional effects. ORVs would cause localized increases in particulates as well as regional effects. The regional particulate levels would be the same regardless of wilderness status, as ORVs would simply be displaced to nearby areas from designated wilderness. If organized events were permitted through areas now in WSA status, but later released, then it is likely that large amounts of particulates would be produced, which would affect local air quality, intermittently. Regional air quality would remain the same, as organized events would still occur, but would avoid designated wilderness.

7. Pending completion of appropriate EISs as a result of a court action, BLM is prohibited from using herbicides in Region IX. Although vegetation control was identified in the Caliente Resource Area's Management Framework Plan, no activity plans, which would be necessary to propose and carry out a conversion project, have been programmed. When and if such activity plans are developed, then the method of conversion will be proposed and an environmental analysis will be made considering the effects of that and other methods.

COMMENT LETTER 9



STATE OF NEVADA

RICHARD H. BRYAN
Governor

LINDA A. RYAN
Director

STATE OFFICE OF COMMUNITY SERVICES
Capitol Complex
Carson City, Nevada 89710
(702) 885-4420

January 3, 1985

Kemp Conn, District Manager
Las Vegas District
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Re: State Agency Comments on the Caliente Draft Wilderness EIS.

Dear Mr. Conn:

Attached are comments from state agencies on the above mentioned project. These comments are provided for your information only. The State's position on the DEIS has been forwarded under separate cover.

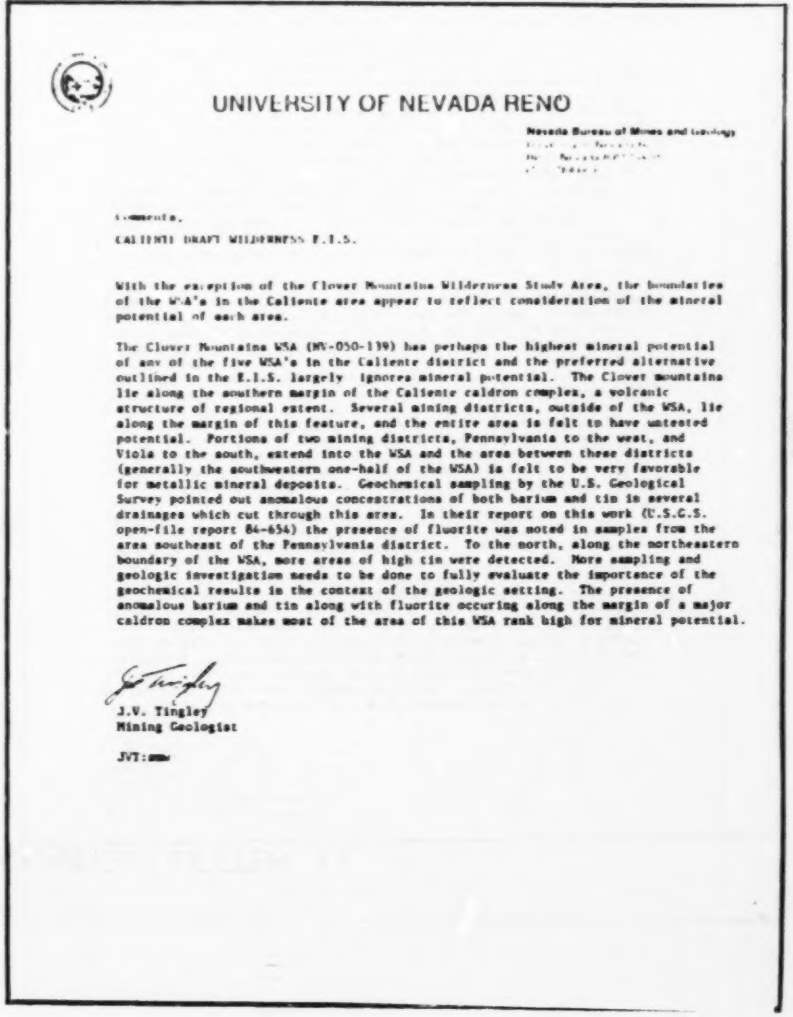
Sincerely,

John B. Walker

John B. Walker, Coordinator
State Clearinghouse, SPOC/OCS

JPW/11
Attachments

COMMENT LETTER 10



UNIVERSITY OF NEVADA RENO

Nevada Bureau of Mines and Geology

Comments,

CALIENTE DRAFT WILDERNESS E.I.S.

With the exception of the Clover Mountains Wilderness Study Area, the boundaries of the WSA's in the Caliente area appear to reflect consideration of the mineral potential of each area.

The Clover Mountains WSA (NV-050-139) has perhaps the highest mineral potential of any of the five WSA's in the Caliente district and the preferred alternative outlined in the E.I.S. largely ignores mineral potential. The Clover mountains lie along the southern margin of the Caliente caldron complex, a volcanic structure of regional extent. Several mining districts, outside of the WSA, lie along the margin of this feature, and the entire area is felt to have untested potential. Portions of two mining districts, Pennsylvania to the west, and Viola to the south, extend into the WSA and the area between these districts (generally the southwestern one-half of the WSA) is felt to be very favorable for metallic mineral deposits. Geochemical sampling by the U.S. Geological Survey pointed out anomalous concentrations of both barium and tin in several drainages which cut through this area. In their report on this work (U.S.G.S. open-file report 84-654) the presence of fluorite was noted in samples from the area southeast of the Pennsylvania district. To the north, along the northeastern boundary of the WSA, more areas of high tin were detected. More sampling and geologic investigation needs to be done to fully evaluate the importance of the geochemical results in the context of the geologic setting. The presence of anomalous barium and tin along with fluorite occuring along the margin of a major caldron complex makes most of the area of this WSA rank high for mineral potential.

J.V. Tingley
Mining Geologist

JVT:mmw

RICHARD H. BRYAN
Governor

STATE OF NEVADA

[illegible]
Director

DEPARTMENT OF MINERALS
400 W. King Street, Suite 106
Carson City, Nevada 89710
(702) 885-5050

November 2, 1984

DEPARTMENT OF MINERALS EVALUATION

CALIENTE DRAFT WILDERNESS EIS
SAI 85300016

The total acreage for the Caliente proposed Wilderness comprises 508,423 acres. This is divided among five areas which are discussed individually below.

0139 Clover Mountains This area comprises 84,935 acres in southeastern Lincoln County. The area is noted for three mining districts which are the Pennsylvania, the Cherokee (Viola), and the Wells Cargo.

The Pennsylvania district is near the head of Pennsylvania Canyon, in T 6 S, R 67 E. All known mineralization is contained in the Pennsylvania quartz vein which contains gold, silver and copper ore deposits. Sample data by Cordilleran Exploration at the Nevada Bureau of Mines and Geology in Reno, Nevada, indicate gold values as high as .086 oz/ton and silver values as high as .58 oz/ton in the Pennsylvanian quartz vein. Jasperoid samples by John Welsh in 1967 indicated ranges of .45 to .56 oz/ton gold and .52 to 4.85 oz/ton silver from pit grab samples.

The Cherokee (Viola) district is located along the south edge of the Clover Mountains, and is noted for silver, copper, lead, zinc and mercury mineralization. The ore deposits occur in jasperoid (siliceous) zones within the Mississippi and Permian Kaibab limestones. Some deposits have also been noted to contain appreciable amounts of antimony, cadmium and molybdenum, by spectrographic analysis. The combined production of the Pennsylvania and Cherokee districts between 1915-1959 was: 359 ounces gold; 5,159 ounces silver; 4,100 pounds copper; 1,500 pounds lead, and 11,050 tons of fluorspar.

The Wells Cargo area is also located in the southern Clover Mountains, and contains manganese and fluorspar deposits. The total flourite production through 1971 is recorded as 44,900 tons of 69% (average grade) CaF_2. Manganese is located at the Culverwell mine along a fault zone separating Mississippi limestone and Tertiary volcanics. The fluorspar occurs as replacement bodies in silicified Mississippi limestone.

The Clover Mountains area in general bears oil and gas potential, due to being located within the structural area known as the overthrust belt.

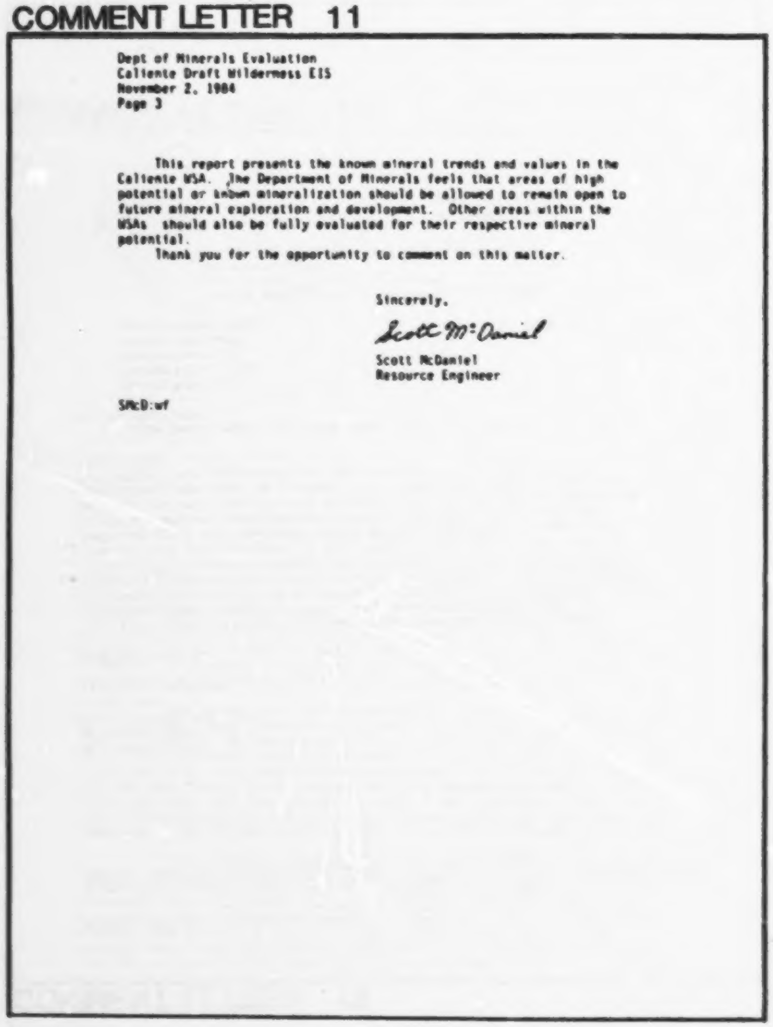
0177 Delamar Mountains This area contains 126,257 acres in the southern and south-central Delamar Mountains. Mineral occurrences include silica, lime, uranium, perlite, phosphate, sand and gravel. Immediately north of the area is the Delamar mining district which was noted for extensive gold, lead and silver production and minor copper production from 1892-1950. This area is also located in the overthrust structural belt and may bear favorable oil and gas potential beneath the Tertiary volcanic cap rock. Nearly the entire area is currently leased for oil and gas. The closest exploration hole drilled was by Texaco, Inc., in 1972. The Federal #1 was drilled to a depth of 7,030' and was completed as a dry hole in the very central-southernmost region of Lincoln County (bordering this study area in the SE¼, NE¼, Section 38, T 12 S, R 65 E; within the Meadow Valley Range Study Area).

0156 Meadow Valley Range This area comprises 185,887 acres in southern Lincoln County and northernmost Clark County. Permian redbeds and Paleozoic carbonate rocks dominate this region and create a structurally complex geologic setting. This area is also part of the overthrust belt and bears excellent oil and gas potential as mentioned previously. Currently, the entire area is leased for oil and gas. To date, the subsurface geology of the area is not clearly understood, with only one exploratory test being drilled (as decribed above). Other mineral commodities in the area include sand and gravel, silica, lime, gypsum and uranium. Cochran has estimated over one million tons of mineral reserves in the northern portion of the WSA. The Robb gypsum deposit is located in Permian redbeds just west of the railroad siding at Galt. The Johnson and Fitchett perlite deposit is located in Sections 27-29 and 33-35, T 8 S, R 66 E.

0161 Mormon Mountains This area comprises 162,887 acres in southern Lincoln County, and northernmost Clark County. The Mormon Mountains form a subcircular dome 15 to 20 miles wide composed of Precambrian igneous and metamorphic rocks and Paleozoic carbonates. This area is structurally complex, consisting of reverse faults and fold belts. In this respect, the area is also an excellent overthrust belt target for oil and gas exploration. Known mineral occurrences include silica, lime, gypsum, vermiculite, uranium, copper, sand and gravel. The copper prospect is near Moapa Peak in Section 2, T 12 S, R 67 E. Pan concentrate sample data available at the Nevada Bureau of Mines and Geology indicate good tin values (500-2000 ppm) in the Mormon, Delamar and South Pahroc WSA's. The Mormon Mountains also have anonymously high antimony values (up to 2000 ppm). Both tin and antimony are indicator elements for strategic mineral depostis such as tungsten and molybdenum.

0132 South Pahroc Range This area consists of 28,600 acres in central Lincoln County. The main part of the range is a tilted block of Tertiary volcanic rocks which dip approximately 15° west. Perlite is mined from unit E in the volcanic sequence (Oligocene-Miocene age) in the Kopenite (Mackie, Delamar) mine 5 miles south of US Highway 93 in Section 34, T 5 S, R 62 E. Five sections in the western part of the WSA are also under oil and gas leases. This area has been estimated to have 15,460,000 tons of reserves by Cochran in 1951. Other mineral commodities in the range include uranium, sand and gravel.

COMMENT LETTER 11



Dept of Minerals Evaluation
Caliente Draft Wilderness EIS
November 2, 1984
Page 3

This report presents the known mineral trends and values in the Caliente WSA. The Department of Minerals feels that areas of high potential or known mineralization should be allowed to remain open to future mineral exploration and development. Other areas within the WSAs should also be fully evaluated for their respective mineral potential.

Thank you for the opportunity to comment on this matter.

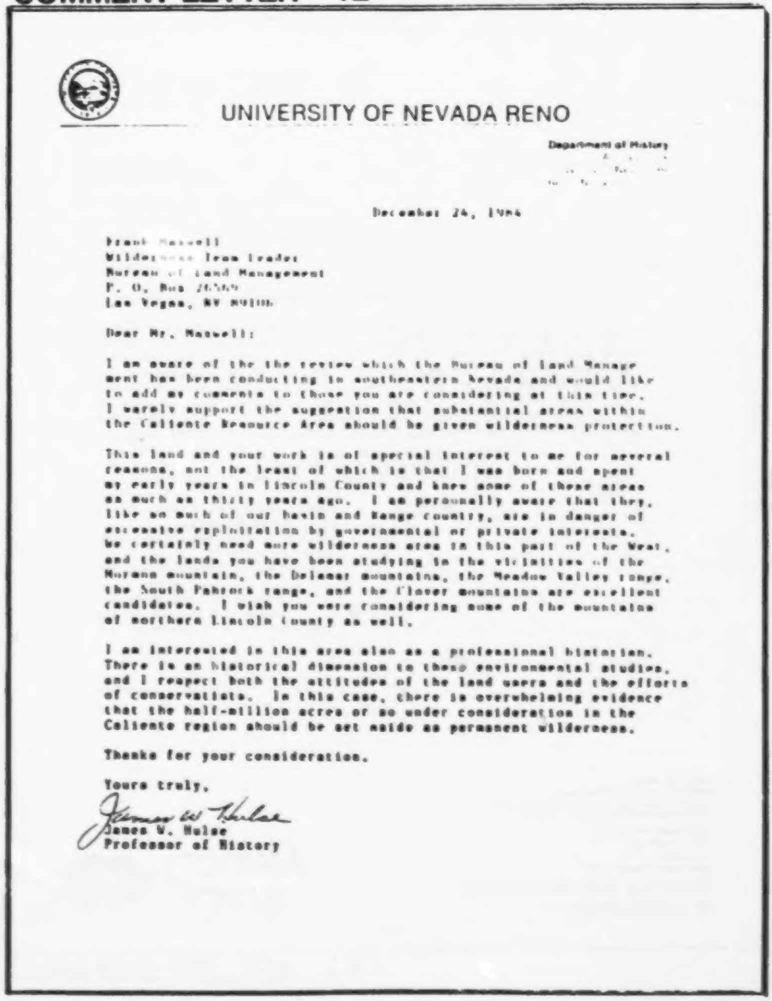
Sincerely,

Scott McDaniel

Scott McDaniel
Resource Engineer

SMcD:wf

COMMENT LETTER 12



UNIVERSITY OF NEVADA RENO

Department of History

December 24, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, NV 89126

Dear Mr. Maxwell:

I am aware of the the review which the Bureau of Land Management has been conducting in southeastern Nevada and would like to add my comments to those you are considering at this time. I warmly support the suggestion that substantial areas within the Caliente Resource Area should be given wilderness protection.

This land and your work is of special interest to me for several reasons, not the least of which is that I was born and spent my early years in Lincoln County and knew some of these areas as much as thirty years ago. I am personally aware that they, like so much of our Basin and Range country, are in danger of excessive exploitation by governmental or private interests. We certainly need more wilderness area in this part of the West, and the lands you have been studying in the vicinities of the Mormon mountain, the Delamar mountains, the Meadow Valley range, the South Pahroc range, and the Clover mountains are excellent candidates. I wish you were considering some of the mountains of northern Lincoln County as well.

I am interested in this area also as a professional historian. There is an historical dimension to these environmental studies, and I respect both the attitudes of the land users and the efforts of conservatists. In this case, there is overwhelming evidence that the half-million acres or so under consideration in the Caliente region should be set aside as permanent wilderness.

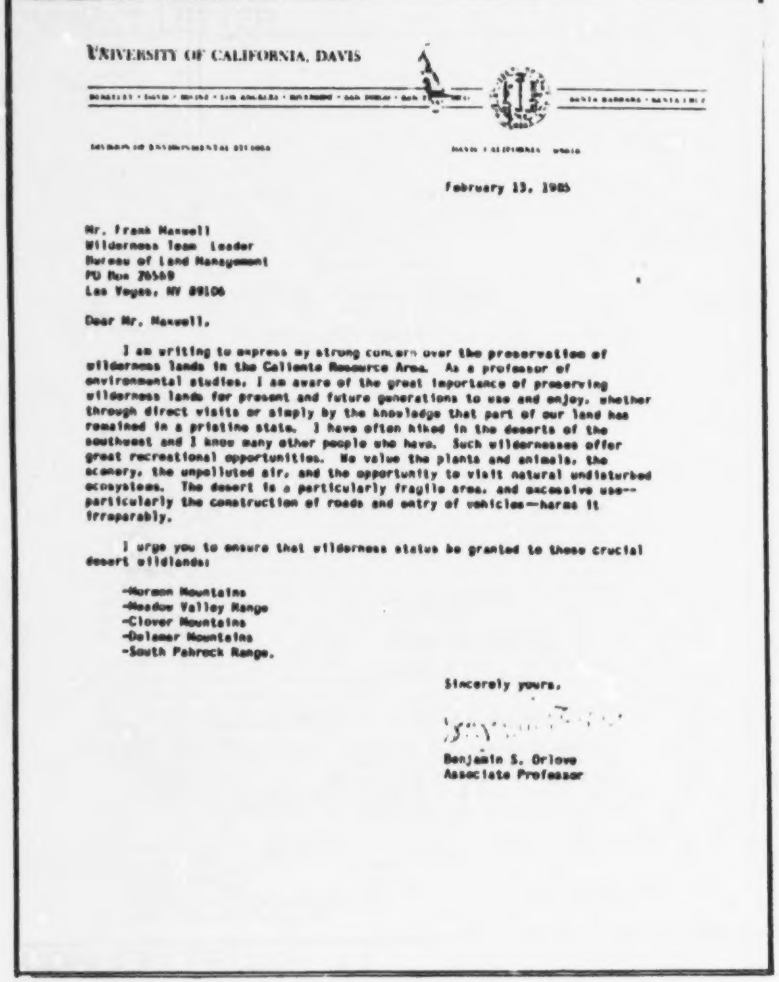
Thanks for your consideration.

Yours truly,

James W. Hulse

James W. Hulse
Professor of History

COMMENT LETTER 13



UNIVERSITY OF CALIFORNIA, DAVIS

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO
SANTA BARBARA • SANTA CRUZ

DIVISION OF ENVIRONMENTAL STUDIES
DAVIS, CALIFORNIA 95616

February 13, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

I am writing to express my strong concern over the preservation of wilderness lands in the Caliente Resource Area. As a professor of environmental studies, I am aware of the great importance of preserving wilderness lands for present and future generations to use and enjoy, whether through direct visits or simply by the knowledge that part of our land has remained in a pristine state. I have often hiked in the deserts of the southwest and I know many other people who have. Such wildernesses offer great recreational opportunities. We value the plants and animals, the scenery, the unpolluted air, and the opportunity to visit natural undisturbed ecosystems. The desert is a particularly fragile area, and excessive use--particularly the construction of roads and entry of vehicles—harms it irreparably.

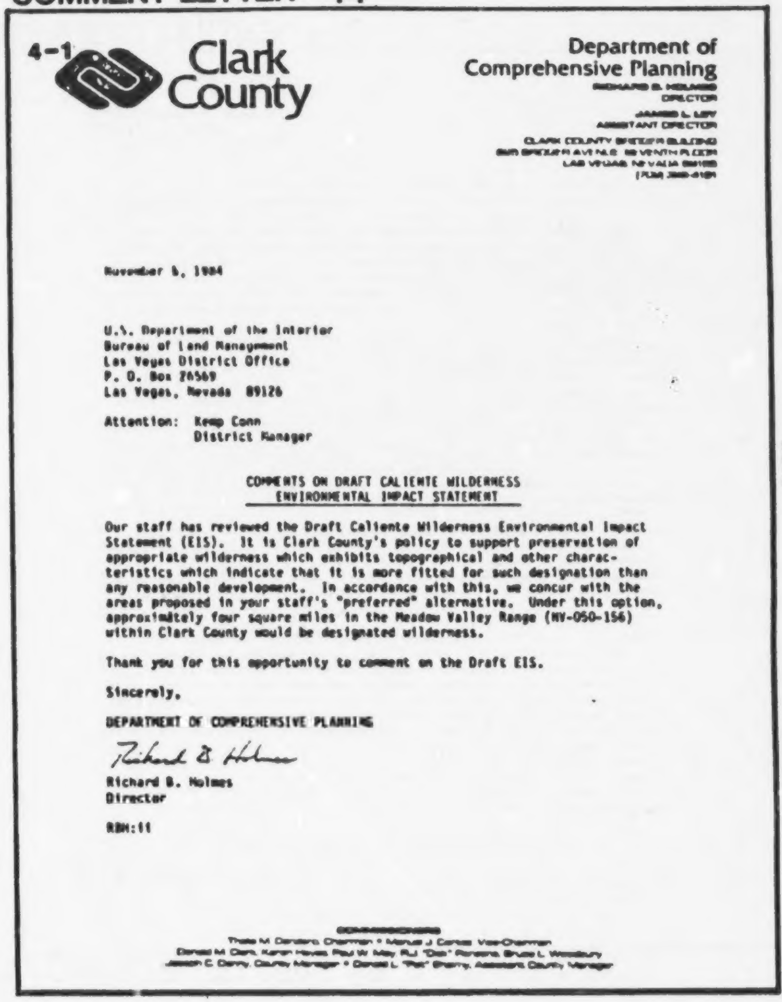
I urge you to ensure that wilderness status be granted to these crucial desert wildlands:

-Mormon Mountains
-Meadow Valley Range
-Clover Mountains
-Delamar Mountains
-South Pahrock Range.

Sincerely yours,

Benjamin S. Orlove
Associate Professor

COMMENT LETTER 14



4-1

Clark County

Department of
Comprehensive Planning
RICHARD B. HOLMES
DIRECTOR
JAMES L. LEY
ASSISTANT DIRECTOR
CLARK COUNTY BRIDGER BUILDING
500 BRIDGER AVENUE, SEVENTH FLOOR
LAS VEGAS, NEVADA 89101
(702) 386-4181

November 6, 1984

U.S. Department of the Interior
Bureau of Land Management
Las Vegas District Office
P. O. Box 26569
Las Vegas, Nevada 89126

Attention: Kemp Conn
District Manager

COMMENTS ON DRAFT CALIENTE WILDERNESS
ENVIRONMENTAL IMPACT STATEMENT

Our staff has reviewed the Draft Caliente Wilderness Environmental Impact Statement (EIS). It is Clark County's policy to support preservation of appropriate wilderness which exhibits topographical and other characteristics which indicate that it is more fitted for such designation than any reasonable development. In accordance with this, we concur with the areas proposed in your staff's "preferred" alternative. Under this option, approximately four square miles in the Meadow Valley Range (NV-050-156) within Clark County would be designated wilderness.

Thank you for this opportunity to comment on the Draft EIS.

Sincerely,

DEPARTMENT OF COMPREHENSIVE PLANNING

Richard B. Holmes

Richard B. Holmes
Director

RBH:ll

COMMISSIONERS
Thalia M. Dondero, Chairman • Manuel J. Cortez, Vice-Chairman
Donald M. Clark, Karen Hayes, Paul W. May, R.J. "Dick" Ronzone, Bruce L. Woodbury
[illegible] C. [illegible], County Manager • Donald L. "Pat" Shalmy, Assistant County Manager

COMMENT LETTER 15

A Nevada · California energy generation development in White Pine County
Development Manager
Los Angeles Department of Water and Power
Room 831, Post Office Box 111, Los Angeles, California 90051

October 16, 1984

Mr. Kemp Conn, District Manager
Bureau of Land Management
Las Vegas District
U.S. Department of the Interior
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Mr. Conn:

Caliente Draft Wilderness
Environmental Impact Statement

Thank you for the opportunity to review the Caliente Draft Wilderness Environmental Impact Statement. The White Pine Power Project (WPPP) supports the Bureau of Land Management (BLM) Preferred Alternative for wilderness recommendation for the Caliente Resource Area. The BLM Preferred Alternative will provide a planning utility corridor for WPPP along the western boundary of the Delamar Mountains Wilderness Study Area (WSA). The Resource Development Alternative and No Wilderness Alternative would also provide planning utility corridors for WPPP.

The WPPP preferred transmission corridor for the two 500 kilovolt (kv) alternating current (ac) transmission lines in the vicinity of the Delamar Mountains, as presented in the WPPP Final Environmental Impact Statement, is located east of the existing 69 kv ac transmission line between the Delamar Mountains WSA and the Meadow Valley Range WSA (see enclosed figure). The preferred corridor was selected based on the likelihood that the BLM recommendation on the Caliente WSAs would not be acted upon by Congress prior to the construction of the WPPP transmission lines.

An alternate transmission corridor is located to the west of the Delamar Mountains. The WPPP indicated by letters on December 15, 1980 and July 6, 1983 that this corridor would be adversely impacted if the Delamar Mountains WSA was recommended by the BLM to be a Wilderness Area as originally proposed. This was because the western boundary of the Delamar Mountains WSA was coincidental with the eastern shoulder of U.S. Highway 93, thereby leaving no room for two WPPP transmission lines.

COMMENT LETTER 15

If the BLM recommendation to designate all or part of the Delamar Mountains WSA as non-wilderness is approved by the Congress prior to the construction of the two WPPP transmission lines, the alternate corridor to the west of the Delamar Mountains could be reconsidered. This corridor would be preferred by WPPP for both environmental and economic reasons.

Should you require further information, please contact Mr. Michael Yamada at (213) 481-4029.

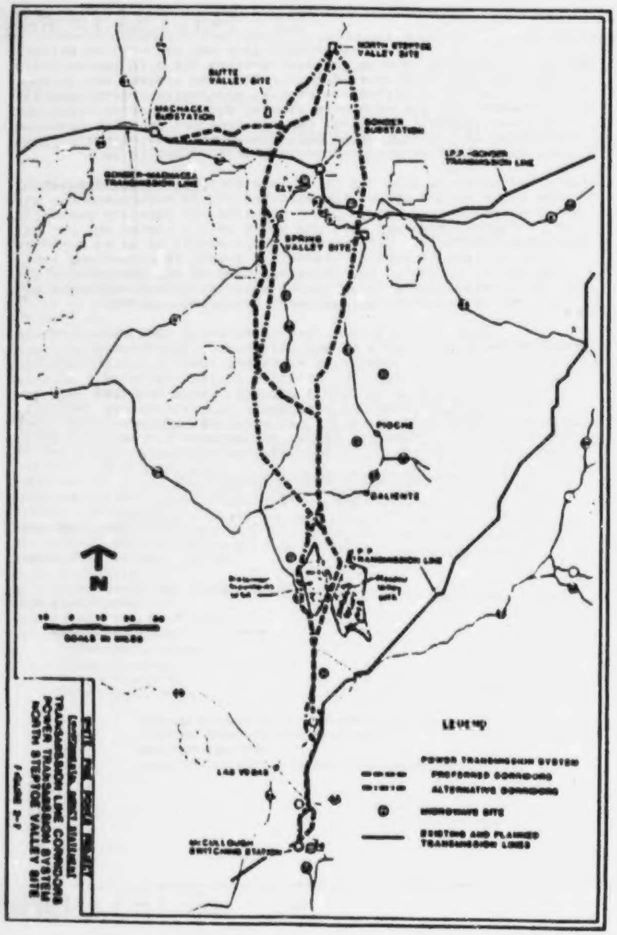
Very truly yours,

ELDON A. COTTON
Project Manager

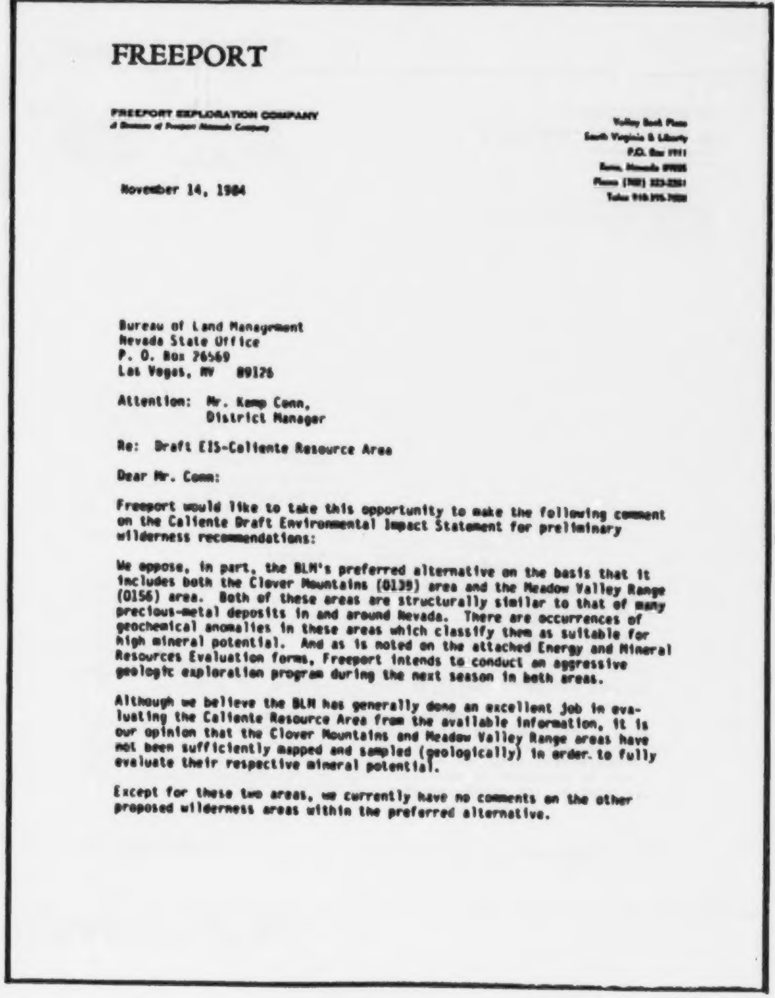
Enclosure

cc: Messrs. Edward F. Spang w/enc.
Edward E. Tilzey "
Merrill DeSpain "
George Cropper "
Michael Yamada "

COMMENT LETTER 15


NORTH STEPTOE VALLEY SITE
BUTTE VALLEY SITE
MACHACEK SUBSTATION
GONDER SUBSTATION
GONDER-MACHACEK TRANSMISSION LINE
I.P.P.-GONDER TRANSMISSION LINE
ELY
SPRING VALLEY SITE
PIOCHE
CALIENTE
I.P.P. TRANSMISSION LINE
N
SCALE IN MILES
LAS VEGAS
McCULLOUGH SWITCHING STATION
LEGEND
POWER TRANSMISSION SYSTEM
PREFERRED CORRIDORS
ALTERNATIVE CORRIDORS
MICROWAVE SITE
EXISTING AND PLANNED TRANSMISSION LINES
TRANSMISSION LINE CORRIDORS
POWER TRANSMISSION SYSTEM
NORTH STEPTOE VALLEY SITE

COMMENT LETTER 16



FREEPORT

FREEPORT EXPLORATION COMPANY
A Division of Freeport Minerals Company

Valley Bank Plaza
South Virginia & Liberty
P.O. Box [illegible]
Reno, Nevada [illegible]
Phone (702) [illegible]
Telex [illegible]

November 14, 1984

Bureau of Land Management
Nevada State Office
P. O. Box 26569
Las Vegas, NV 89126

Attention: Mr. Kemp Conn,
District Manager

Re: Draft EIS-Caliente Resource Area

Dear Mr. Conn:

Freeport would like to take this opportunity to make the following comment on the Caliente Draft Environmental Impact Statement for preliminary wilderness recommendations:

We oppose, in part, the BLM's preferred alternative on the basis that it includes both the Clover Mountains (0139) area and the Meadow Valley Range (0156) area. Both of these areas are structurally similar to that of many precious-metal deposits in and around Nevada. There are occurrences of geochemical anomalies in these areas which classify them as suitable for high mineral potential. And as is noted on the attached Energy and Mineral Resources Evaluation forms, Freeport intends to conduct an aggressive geologic exploration program during the next season in both areas.

Although we believe the BLM has generally done an excellent job in evaluating the Caliente Resource Area from the available information, it is our opinion that the Clover Mountains and Meadow Valley Range areas have not been sufficiently mapped and sampled (geologically) in order to fully evaluate their respective mineral potential.

Except for these two areas, we currently have no comments on the other proposed wilderness areas within the preferred alternative.

COMMENT LETTER 16

Bureau of Land Management
November 14, 1984
Page 2

Thank you again for the opportunity to comment on this very important BEIS.

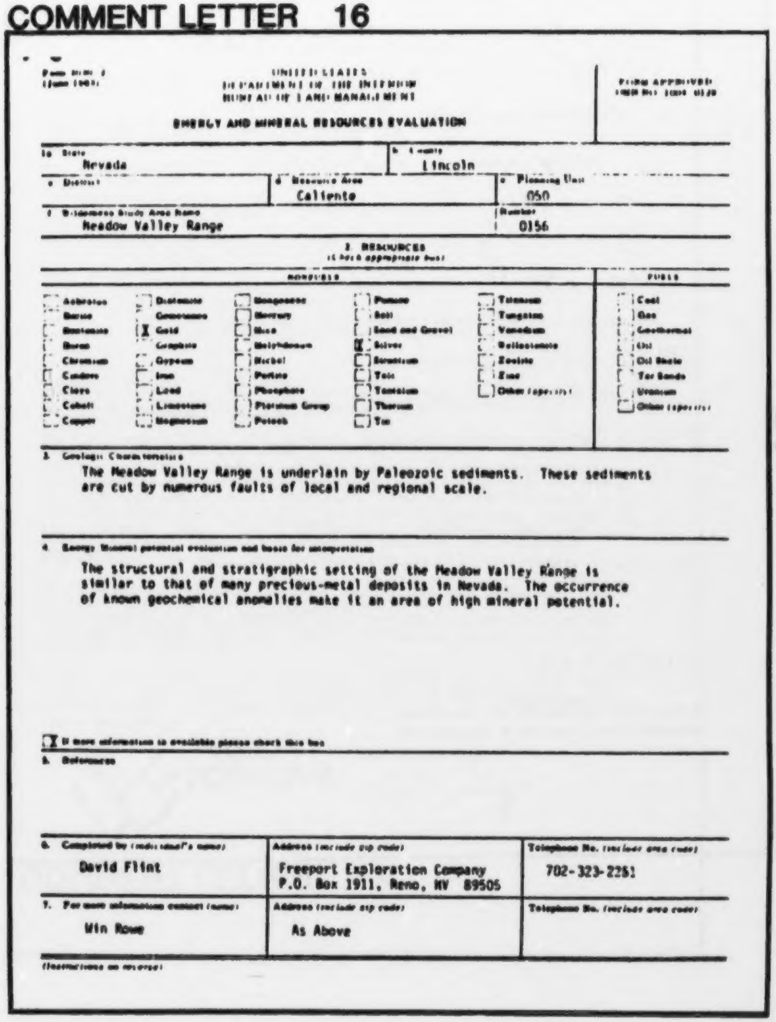
Very truly yours,

M. L. Berkbigler
Legal Assistant

MLB/sh

Attachments

COMMENT LETTER 16



Form [illegible]
(June 1981)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. [illegible]

ENERGY AND MINERAL RESOURCES EVALUATION

1a State Nevada	b County Lincoln	
c District	d Resource Area Caliente	e Planning Unit 050
f Wilderness Study Area Name Meadow Valley Range		Number 0156

2. RESOURCES
(Check appropriate box)

NONFUELS

☐ Asbestos
☐ Barite
☐ Bentonite
☐ Boron
☐ Chromium
☐ Cinders
☐ Clays
☐ Cobalt
☐ Copper
☐ Diatomite
☐ Gemstones
☒ Gold
☐ Graphite
☐ Gypsum
☐ Iron
☐ Lead
☐ Limestone
☐ Magnesium
☐ Manganese
☐ Mercury
☐ Mica
☐ Molybdenum
☐ Nickel
☐ Perlite
☐ Phosphate
☐ Platinum Group
☐ Potash
☐ Pumice
☐ Salt
☐ Sand and Gravel
☒ Silver
☐ Strontium
☐ Talc
☐ Tantalum
☐ Thorium
☐ Tin
☐ Titanium
☐ Tungsten
☐ Vanadium
☐ Wollastonite
☐ Zeolite
☐ Zinc
☐ Other (specify)

FUELS

☐ Coal
☐ Gas
☐ Geothermal
☐ Oil
☐ Oil Shale
☐ Tar Sands
☐ Uranium
☐ Other (specify)

3. Geologic Characteristics

The Meadow Valley Range is underlain by Paleozoic sediments. These sediments are cut by numerous faults of local and regional scale.

4. Energy Mineral potential evaluation and basis for interpretation

The structural and stratigraphic setting of the Meadow Valley Range is similar to that of many precious-metal deposits in Nevada. The occurrence of known geochemical anomalies make it an area of high mineral potential.

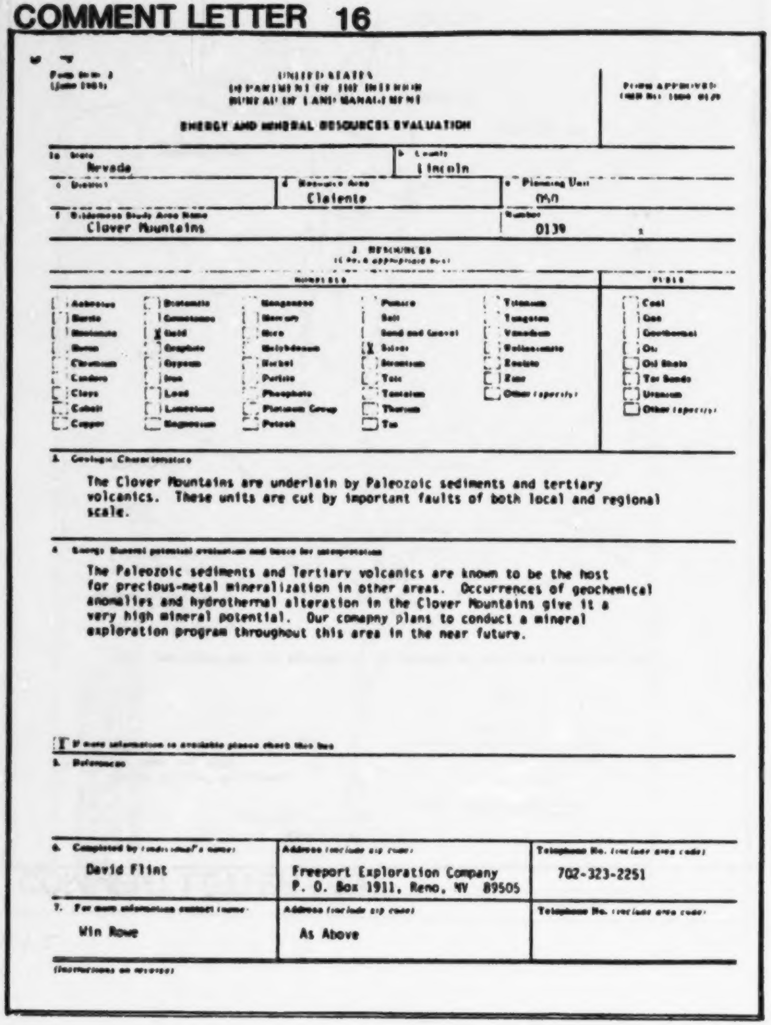
☒ If more information is available please check this box

5. References

6. Completed by (individual's name) David Flint	Address (include zip code) Freeport Exploration Company P.O. Box 1911, Reno, NV 89505	Telephone No. (include area code) 702-323-2251
7. For more information contact (name) Win Rowe	Address (include zip code) As Above	Telephone No. (include area code)

(Instructions on reverse)

COMMENT LETTER 16



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED

ENERGY AND MINERAL RESOURCES EVALUATION

1a. State: Nevada
b. County: Lincoln
c. District:
d. Resource Area: Caliente
e. Planning Unit: 050
f. Wilderness Study Area Name: Clover Mountains
Number: 0139

2. RESOURCES (Check appropriate box)

MINERALS					FLUIDS
☐ Asbestos	☐ Diatomite	☐ Manganese	☐ Pumice	☐ Titanium	☐ Coal
☐ Barite	☐ Gemstones	☐ Mercury	☐ Salt	☐ Tungsten	☐ Gas
☐ Bentonite	☒ Gold	☐ Mica	☐ Sand and Gravel	☐ Vanadium	☐ Geothermal
☐ Boron	☐ Graphite	☐ Molybdenum	☒ Silver	☐ Wollastonite	☐ Oil
☐ Chromium	☐ Gypsum	☐ Nickel	☐ Strontium	☐ Zeolite	☐ Oil Shale
☐ Cinders	☐ Iron	☐ Perlite	☐ Talc	☐ Zinc	☐ Tar Sands
☐ Clays	☐ Lead	☐ Phosphate	☐ Tantalum	☐ Other (specify)	☐ Uranium
☐ Cobalt	☐ Limestone	☐ Platinum Group	☐ Thorium		☐ Other (specify)
☐ Copper	☐ Magnesium	☐ Potash	☐ Tin		

3. Geologic Characteristics

The Clover Mountains are underlain by Paleozoic sediments and tertiary volcanics. These units are cut by important faults of both local and regional scale.

4. Energy Mineral potential evaluation and basis for interpretation

The Paleozoic sediments and Tertiary volcanics are known to be the host for precious-metal mineralization in other areas. Occurrences of geochemical anomalies and hydrothermal alteration in the Clover Mountains give it a very high mineral potential. Our company plans to conduct a mineral exploration program throughout this area in the near future.

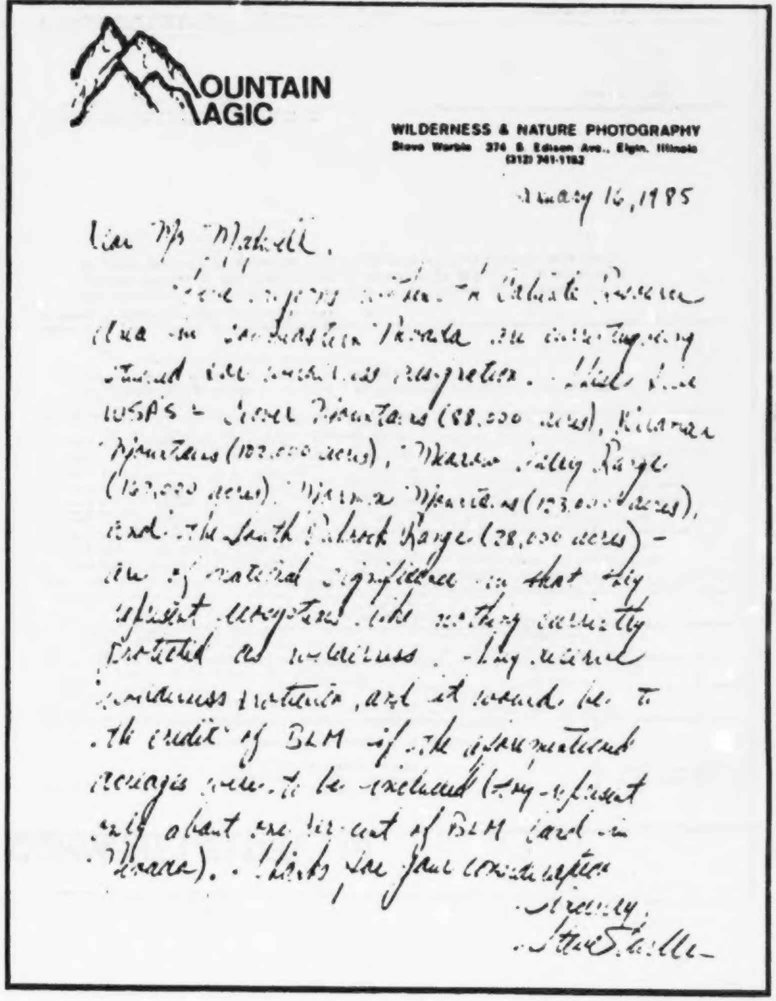
☐ If more information is available please check this box

5. References

6. Completed by (individual's name) David Flint	Address (include zip code) Freeport Exploration Company P. O. Box 1911, Reno, NV 89505	Telephone No. (include area code) 702-323-2251
7. For more information contact (name) Win Rowe	Address (include zip code) As Above	Telephone No. (include area code)

(Instructions on reverse)

COMMENT LETTER 17



MOUNTAIN MAGIC

WILDERNESS & NATURE PHOTOGRAPHY
Steve Warble 374 S. Edison Ave., Elgin, Illinois
(312) 741-1182

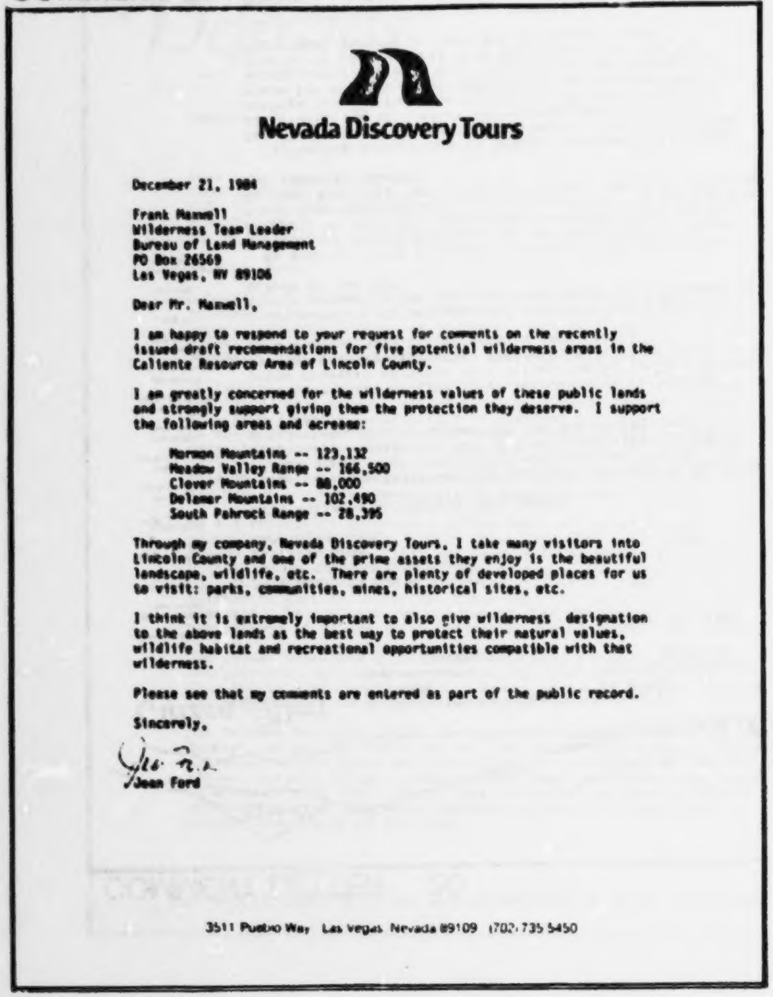
January 16, 1985

Dear Ms Mitchell,

Five regions within the Caliente Resource Area in southeastern Nevada are outstandingly suited for wilderness designation. These five WSA's - Clover Mountains (88,000 acres), Delamar Mountains (102,000 acres), Meadow Valley Range (162,000 acres), Mormon Mountains (163,000 acres), and the South Pahroc Range (28,000 acres) - are of national significance in that they represent ecosystems like nothing currently protected as wilderness. They deserve wilderness protection, and it would be to the credit of BLM if the aforementioned acreages were to be included (they represent only about one percent of BLM land in Nevada). Thanks for your consideration.

Sincerely,
Steve Warble

COMMENT LETTER 18



Nevada Discovery Tours

December 21, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

I am happy to respond to your request for comments on the recently issued draft recommendations for five potential wilderness areas in the Caliente Resource Area of Lincoln County.

I am greatly concerned for the wilderness values of these public lands and strongly support giving them the protection they deserve. I support the following areas and acreage:

Mormon Mountains -- 123,132
Meadow Valley Range -- 166,500
Clover Mountains -- 88,000
Delamar Mountains -- 102,490
South Pahrock Range -- 28,395

Through my company, Nevada Discovery Tours, I take many visitors into Lincoln County and one of the prime assets they enjoy is the beautiful landscape, wildlife, etc. There are plenty of developed places for us to visit: parks, communities, mines, historical sites, etc.

I think it is extremely important to also give wilderness designation to the above lands as the best way to protect their natural values, wildlife habitat and recreational opportunities compatible with that wilderness.

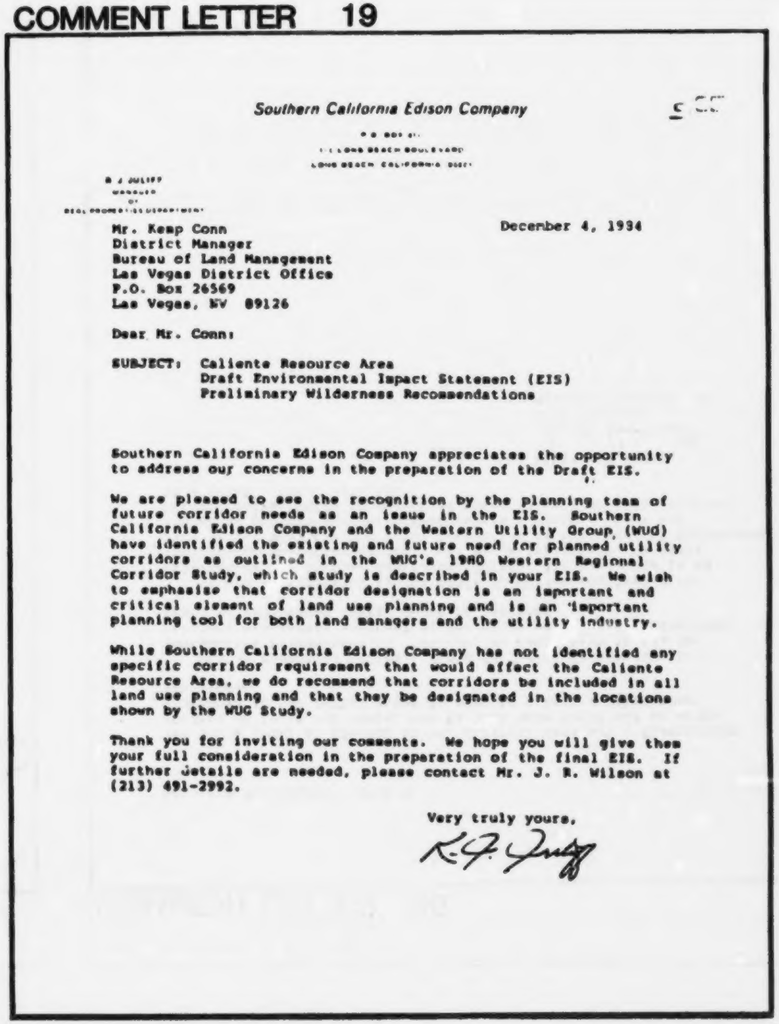
Please see that my comments are entered as part of the public record.

Sincerely,

Jean Ford

3511 Pueblo Way Las Vegas Nevada 89109 (702) 735 5450

COMMENT LETTER 19



Southern California Edison Company

December 4, 1934

Mr. Kemp Conn
District Manager
Bureau of Land Management
Las Vegas District Office
P.O. Box 26569
Las Vegas, NV 89126

Dear Mr. Conn:

SUBJECT: Caliente Resource Area
Draft Environmental Impact Statement (EIS)
Preliminary Wilderness Recommendations

Southern California Edison Company appreciates the opportunity to address our concerns in the preparation of the Draft EIS.

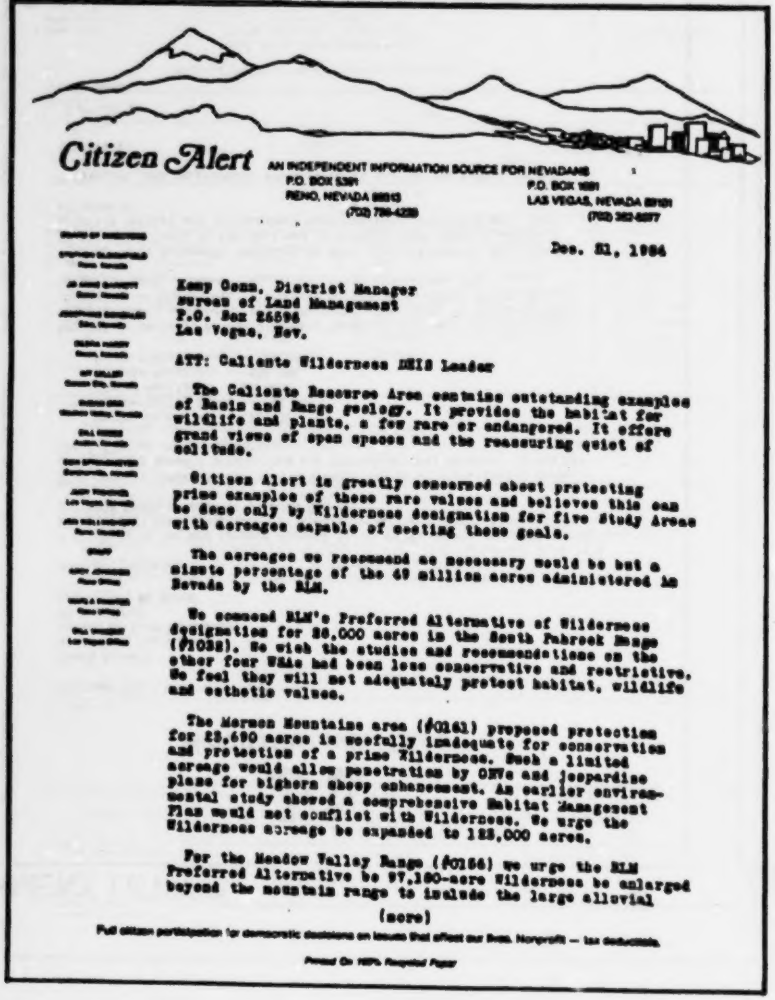
We are pleased to see the recognition by the planning team of future corridor needs as an issue in the EIS. Southern California Edison Company and the Western Utility Group (WUG) have identified the existing and future need for planned utility corridors as outlined in the WUG's 1980 Western Regional Corridor Study, which study is described in your EIS. We wish to emphasize that corridor designation is an important and critical element of land use planning and is an important planning tool for both land managers and the utility industry.

While Southern California Edison Company has not identified any specific corridor requirement that would affect the Caliente Resource Area, we do recommend that corridors be included in all land use planning and that they be designated in the locations shown by the WUG Study.

Thank you for inviting our comments. We hope you will give them your full consideration in the preparation of the final EIS. If further details are needed, please contact Mr. J. R. Wilson at (213) 491-2992.

Very truly yours,

COMMENT LETTER 20



Citizen Alert AN INDEPENDENT INFORMATION SOURCE FOR NEVADANS

P.O. BOX [illegible]
RENO, NEVADA [illegible]
(702) [illegible]

P.O. BOX [illegible]
LAS VEGAS, NEVADA [illegible]
(702) [illegible]

Dec. 31, 1984

Kemp Conn, District Manager
Bureau of Land Management
P.O. Box 26596
Las Vegas, Nev.

ATT: Caliente Wilderness DEIS Leader

The Caliente Resource Area contains outstanding examples of Basin and Range geology. It provides the habitat for wildlife and plants, a few rare or endangered. It offers grand views of open spaces and the reassuring quiet of solitude.

Citizen Alert is greatly concerned about protecting prime examples of these rare values and believes this can be done only by Wilderness designation for five Study Areas with acreages capable of meeting these goals.

The acreages we recommend as necessary would be but a minute percentage of the 49 million acres administered in Nevada by the BLM.

We commend BLM's Preferred Alternative of Wilderness designation for 26,000 acres in the South Pahroc Range (#1032). We wish the studies and recommendations on the other four WSAs had been less conservative and restrictive. We feel they will not adequately protect habitat, wildlife and esthetic values.

The Mormon Mountains area (#0161) proposed protection for 23,690 acres is woefully inadequate for conservation and protection of a prime Wilderness. Such a limited acreage would allow penetration by ORVs and jeopardize plans for bighorn sheep enhancement. An earlier environmental study showed a comprehensive Habitat Management Plan would not conflict with Wilderness. We urge the Wilderness acreage be expanded to 123,000 acres.

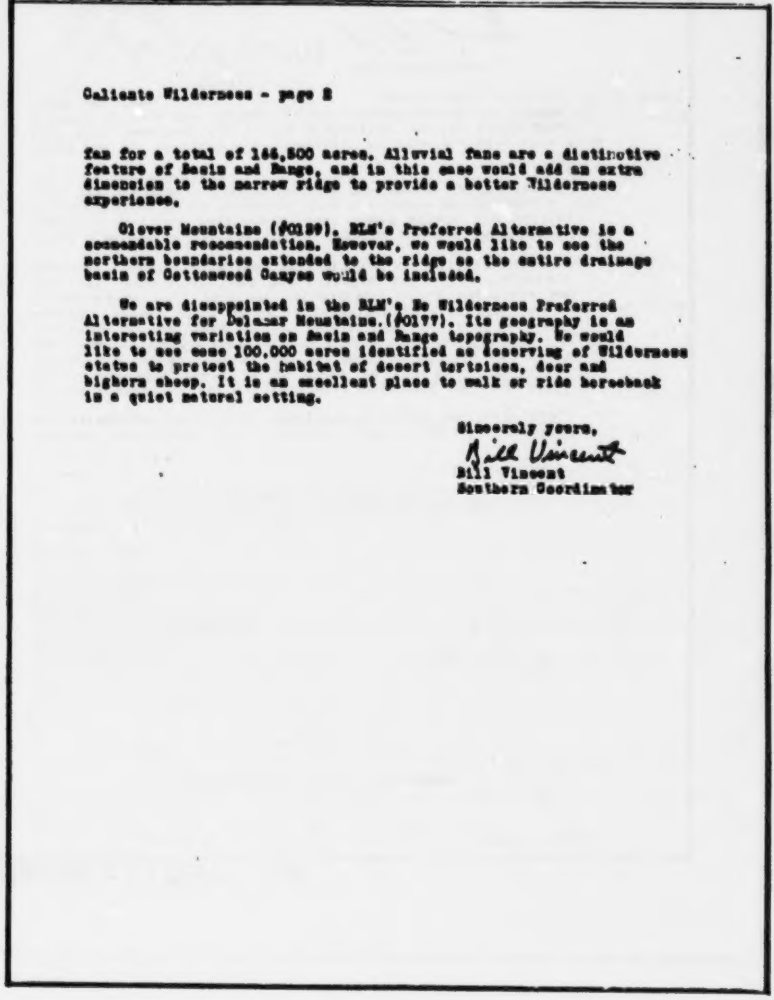
For the Meadow Valley Range (#0156) we urge the BLM Preferred Alternative be 97,180-acre Wilderness be enlarged beyond the mountain range to include the large alluvial

(more)

Full citizen participation for democratic decisions on issues that affect our lives. Nonprofit — tax deductible.

Printed On 100% Recycled Paper

COMMENT LETTER 20



Caliente Wilderness - page 2

fans for a total of 166,800 acres. Alluvial fans are a distinctive feature of Basin and Range, and in this case would add an extra dimension to the narrow ridge to provide a better Wilderness experience.

Clover Mountains (#0139). BLM's Preferred Alternative is a commendable recommendation. However, we would like to see the northern boundaries extended to the ridge so the entire drainage basin of Cottonwood Canyon would be included.

We are disappointed in the BLM's No Wilderness Preferred Alternative for Delamar Mountains (#0177). Its geography is an interesting variation on Basin and Range topography. We would like to see some 100,000 acres identified as deserving of Wilderness status to protect the habitat of desert tortoises, deer and bighorn sheep. It is an excellent place to walk or ride horseback in a quiet natural setting.

Sincerely yours,

Bill Vincent
Bill Vincent
Southern Coordinator

COMMENT LETTER 21

Defenders
OF WILDLIFE

December 28, 1984

Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Team Leader
U.S. Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Mr. Conn:

Defenders of Wildlife submits this letter as our comments and recommendations on the Draft Caliente Wilderness Environmental Impact Statement (DEIS). As you know, this DEIS evaluates five Wilderness Study Areas (WSAs), totaling 388,423 acres in southern Lincoln and northeastern Clark Counties, Nevada.

In general, we strongly support and urge BLM to fully implement the "wilderness accent" alternative, as summarized under Table S-1, page S-4. We believe this "wilderness accent" alternative is reasonable, and provides necessary protection for these magnificent public lands. In addition, we urge BLM to provide full interim protection and management for all five of these WSAs to maintain their pristine characteristics until Congress has had an adequate opportunity to determine their eventual status.

We are especially interested in the important wildlife and other natural values occurring within these five WSAs. For example, the Mormon Mountains (0161) are important for desert tortoise, bighorn sheep, prairie falcon, golden eagle, and spotted bat. Off-road vehicle use and development activities should not be allowed to further jeopardize these important species and their habitats. In addition, we understand this WSA contains unusual populations of Mohave yucca, sandwort, and ponderosa pine groves.

The Clover Mountains (0139) reportedly have a number of springs and perennial streams which provide important habitat values. This WSA is also important for a number of raptor species, including peregrine falcons and golden eagles.

The Delamar Mountains (0177) possess critical desert tortoise habitat, as well as raptor sites. The Meadow Valley Range (0156) possesses a rare flora and has significant wildlife use. Golden eagles, prairie falcons, bighorn sheep, and spotted bat are known to occur in this WSA. Given these important characteristics, we are disappointed that BLM's preferred alternative would only protect about half of this WSA.

COMMENT LETTER 21

Finally, the South Pahroc Range (0132) possesses habitats used by deer, golden eagles, prairie falcons, spotted bat, and other species. In this instance, we generally support and applaud BLM's preferred alternative to protect 99% of this WSA.

Again, please support and implement the "wilderness accent" alternative, and provide full interim protection for these five WSAs.

Thank you very much for considering our views.

Sincerely,

Richard Spotts

Richard Spotts
California/Nevada Representative
Defenders of Wildlife

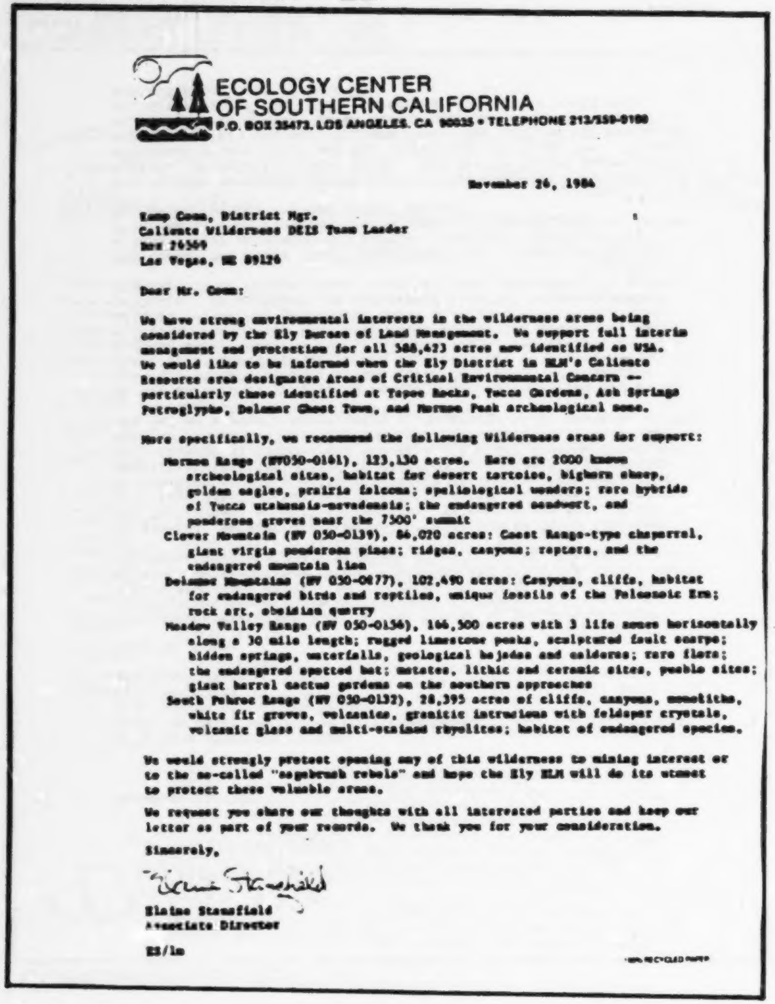
5604 Rosedale Way
Sacramento, CA 95822
(916) 442-6386

RS/js

cc: Edward F. Spang, State Director
U.S. Bureau of Land Management

Interested parties

COMMENT LETTER 22



ECOLOGY CENTER
OF SOUTHERN CALIFORNIA
P.O. BOX 35473, LOS ANGELES, CA 90035 • TELEPHONE 213/559-9160

November 26, 1984

Kemp Conn, District Mgr.
Caliente Wilderness DEIS Team Leader
Box 26569
Las Vegas, NV 89126

Dear Mr. Conn:

We have strong environmental interests in the wilderness areas being considered by the Ely Bureau of Land Management. We support full interim management and protection for all 588,423 acres now identified as WSA. We would like to be informed when the Ely District in BLM's Caliente Resource area designates Areas of Critical Environmental Concern -- particularly those identified at Tepee Rocks, Yucca Gardens, Ash Springs Petroglyphs, Delamar Ghost Town, and Mormon Peak archeological zone.

More specifically, we recommend the following Wilderness areas for support:

Mormon Range (NV050-0161), 123,130 acres. Here are 2000 known archeological sites, habitat for desert tortoise, bighorn sheep, golden eagles, prairie falcons; speliological wonders; rare hybrids of Yucca utahensis-nevadensis; the endangered sandwort, and ponderosa groves near the 7300' summit
Clover Mountain (NV 050-0139), 86,020 acres: Coast Range-type chaparral, giant virgin ponderosa pines; ridges, canyons; raptors, and the endangered mountain lion
Delamar Mountains (NV 050-0877), 102,490 acres: Canyons, cliffs, habitat for endangered birds and reptiles, unique fossils of the Paleozoic Era; rock art, obsidian quarry
Meadow Valley Range (NV 050-0156), 166,300 acres with 3 life zones horizontally along a 30 mile length; rugged limestone peaks, sculptured fault scarps; hidden springs, waterfalls, geological bajadas and calderas; rare flora; the endangered spotted bat; metates, lithic and ceramic sites, pueblo sites; giant barrel cactus gardens on the southern approaches
South Pahroc Range (NV 050-0132), 28,395 acres of cliffs, canyons, monoliths, white fir groves, volcanics, granitic intrusions with feldspar crystals, volcanic glass and multi-stained rhyolites; habitat of endangered species.

We would strongly protest opening any of this wilderness to mining interest or to the so-called "sagebrush rebels" and hope the Ely BLM will do its utmost to protect these valuable areas.

We request you share our thoughts with all interested parties and keep our letter as part of your records. We thank you for your consideration.

Sincerely,

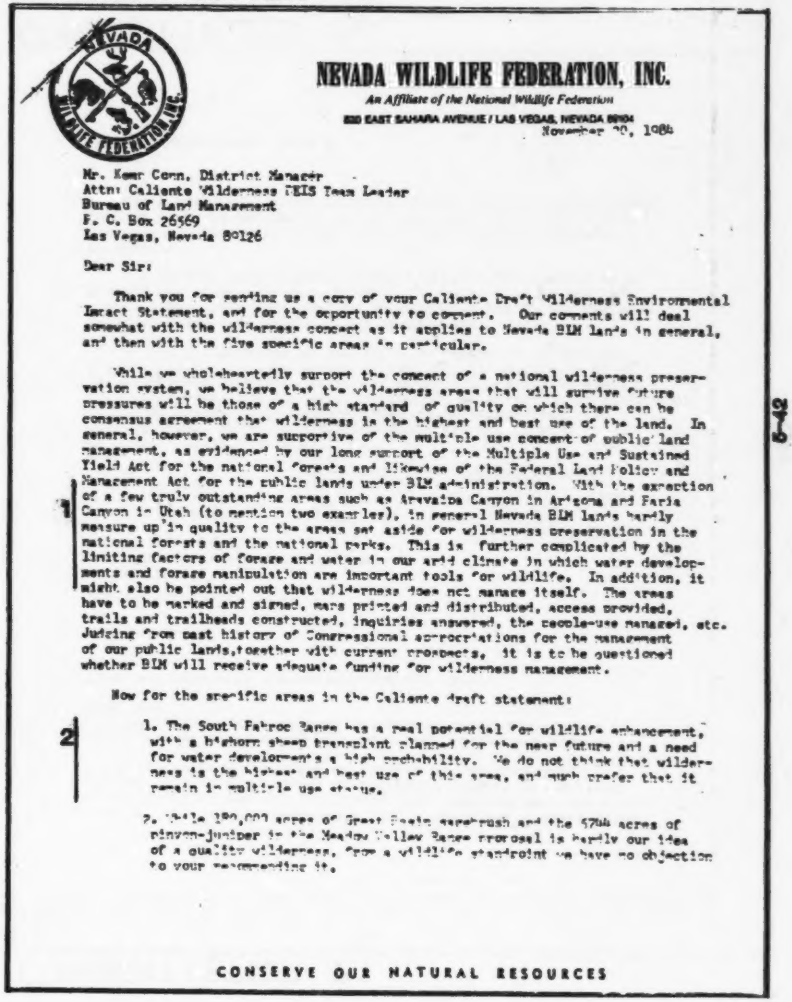
Elaine Stansfield

Elaine Stansfield
Associate Director

ES/lm

100% RECYCLED PAPER

COMMENT LETTER 23



NEVADA WILDLIFE FEDERATION, INC.
An Affiliate of the National Wildlife Federation
820 EAST SAHARA AVENUE / LAS VEGAS, NEVADA 89104

November 20, 1984

Mr. Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, Nevada 89126

Dear Sir:

Thank you for sending us a copy of your Caliente Draft Wilderness Environmental Impact Statement, and for the opportunity to comment. Our comments will deal somewhat with the wilderness concept as it applies to Nevada BLM lands in general, and then with the five specific areas in particular.

1

While we wholeheartedly support the concept of a national wilderness preservation system, we believe that the wilderness areas that will survive future pressures will be those of a high standard of quality on which there can be consensus agreement that wilderness is the highest and best use of the land. In general, however, we are supportive of the multiple use concept of public land management, as evidenced by our long support of the Multiple Use and Sustained Yield Act for the national forests and likewise of the Federal Land Policy and Management Act for the public lands under BLM administration. With the exception of a few truly outstanding areas such as Aravaipa Canyon in Arizona and Paria Canyon in Utah (to mention two examples), in general Nevada BLM lands hardly measure up in quality to the areas set aside for wilderness preservation in the national forests and the national parks. This is further complicated by the limiting factors of forage and water in our arid climate in which water developments and forage manipulation are important tools for wildlife. In addition, it might also be pointed out that wilderness does not manage itself. The areas have to be marked and signed, maps printed and distributed, access provided, trails and trailheads constructed, inquiries answered, the people-use managed, etc. Judging from past history of Congressional appropriations for the management of our public lands, together with current prospects, it is to be questioned whether BLM will receive adequate funding for wilderness management.

Now for the specific areas in the Caliente draft statement:

2

1. The South Pahroc Range has a real potential for wildlife enhancement, with a bighorn sheep transplant planned for the near future and a need for water developments a high probability. We do not think that wilderness is the highest and best use of this area, and much prefer that it remain in multiple use status.

2. While 180,000 acres of Great Basin sagebrush and the 5704 acres of pinyon-juniper in the Meadow Valley Range proposal is hardly our idea of a quality wilderness, from a wildlife standpoint we have no objection to your recommending it.

CONSERVE OUR NATURAL RESOURCES

COMMENT LETTER 23

3 3. The Mormon Mountains wilderness recommendation meets with our approval provided that its designation will not preclude maintenance of the three large existing water developments in the area.

4 4. The Clover Mountains contain crucial summer and winter range for mule deer, and various water developments and vegetation manipulation projects are necessary for habitat improvement. We therefore urge that this area be retained in multiple use status as the highest and best use of the land.

5. As for the Delamar Mountains, we are in full agreement with your analysis that this area is not suitable for wilderness designation.

In closing it might be apropos to mention the extensive use of the air space over these areas by the U. S. Air Force, and consequently to raise serious questions about the effects on the pristine wilderness experience.

We hope our comments will be of assistance to you, and again wish to express our appreciation for the opportunity to review the draft statement.

Sincerely yours,

John A. Leitch

John A. Leitch, President

RESPONSE LETTER 23

Response to Letter 23

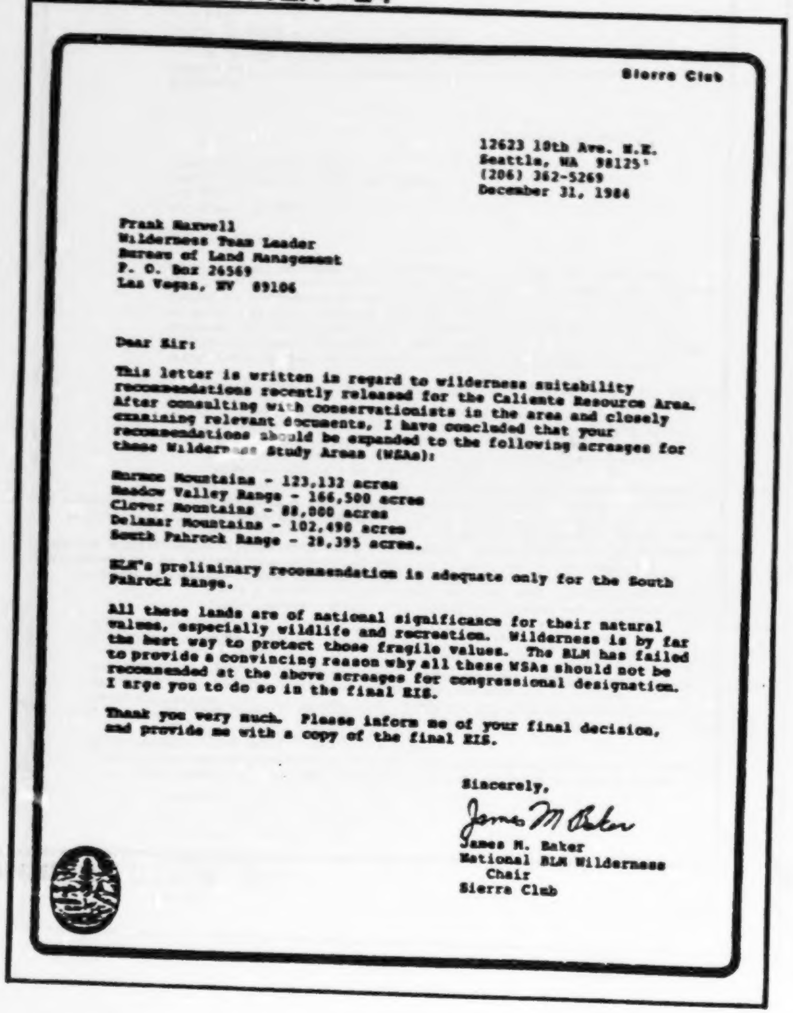
1. The BLM's responsibility under FLPMA is to study roadless areas with basic wilderness qualifications and recommend those which qualify to Congress. It is Congress' prerogative to make the interstate comparisons and choices which you make. As a further clarification of what constitutes wilderness, see Section (c) of the Wilderness Act of September 3, 1964. The presumption is made that adequate funding will be made available by Congress to manage the areas that they designate as Wilderness.

2. Bighorn sheep were historically present in this range and thus may, and have been, reintroduced. Because bighorn sheep have been adversely affected by past human activity, properly planned, designed and located water developments which are compatible with designated wilderness can be installed (Wilderness Management Policy, III.D.2).

3. These guzzlers, if they can be made to function properly, will be maintained in a manner which is compatible with wilderness.

4. Water is not a limiting factor in the Clover Mountains WSA and water developments have been determined to be unnecessary. Vegetation manipulation is estimated to be capable of producing an increase of approximately ten percent in the deer herd presently occupying the 13,440 acres half of which would be treated.

COMMENT LETTER 24



Sierra Club

12623 10th Ave. N.E.
Seattle, WA 98125
(206) 362-5269
December 31, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, NV 89106

Dear Sir:

This letter is written in regard to wilderness suitability recommendations recently released for the Caliente Resource Area. After consulting with conservationists in the area and closely examining relevant documents, I have concluded that your recommendations should be expanded to the following acreages for these Wilderness Study Areas (WSAs):

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres.

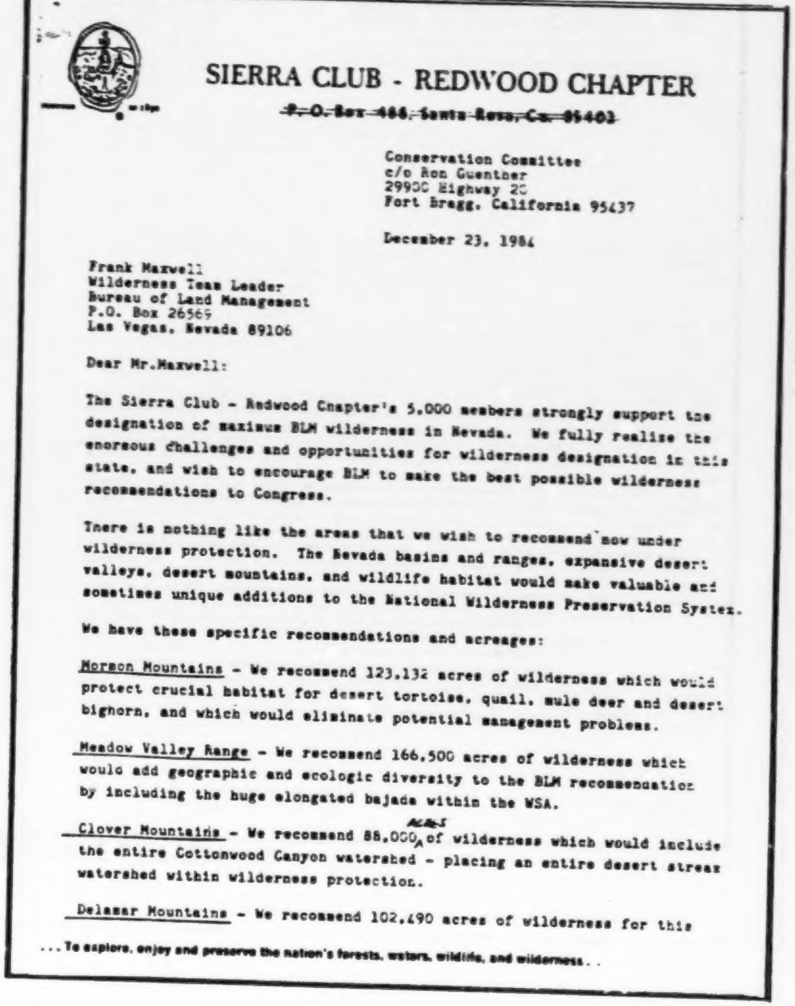
BLM's preliminary recommendation is adequate only for the South Pahrock Range.

All these lands are of national significance for their natural values, especially wildlife and recreation. Wilderness is by far the best way to protect those fragile values. The BLM has failed to provide a convincing reason why all these WSAs should not be recommended at the above acreages for congressional designation. I urge you to do so in the final EIS.

Thank you very much. Please inform me of your final decision, and provide me with a copy of the final EIS.

Sincerely,
James M Baker
James M. Baker
National BLM Wilderness
Chair
Sierra Club

COMMENT LETTER 25



SIERRA CLUB - REDWOOD CHAPTER
~~P. O. Box 466, Santa Rosa, Ca. 95402~~

Conservation Committee
c/o Ron Guenther
29900 Highway 20
Fort Bragg, California 95437

December 23, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr.Maxwell:

The Sierra Club - Redwood Chapter's 5,000 members strongly support the designation of maximum BLM wilderness in Nevada. We fully realise the enormous challenges and opportunities for wilderness designation in this state, and wish to encourage BLM to make the best possible wilderness recommendations to Congress.

There is nothing like the areas that we wish to recommend now under wilderness protection. The Nevada basins and ranges, expansive desert valleys, desert mountains, and wildlife habitat would make valuable and sometimes unique additions to the National Wilderness Preservation System.

We have these specific recommendations and acreages:

Mormon Mountains - We recommend 123,132 acres of wilderness which would protect crucial habitat for desert tortoise, quail, mule deer and desert bighorn, and which would eliminate potential management problems.

Meadow Valley Range - We recommend 166,500 acres of wilderness which would add geographic and ecologic diversity to the BLM recommendation by including the huge elongated bajada within the WSA.

Clover Mountains - We recommend 88,000 acres of wilderness which would include the entire Cottonwood Canyon watershed - placing an entire desert stream watershed within wilderness protection.

Delamar Mountains - We recommend 102,490 acres of wilderness for this

...To explore, enjoy and preserve the nation's forests, waters, wildlife, and wilderness...

COMMENT LETTER 25

-2-

immense plateau, incised with deep twisting canyons and providing outstanding mule deer and bighorn sheep habitat.

South Pahroc Range - We support the BLM recommendation of 23,395 wilderness acres for this rugged WSA.

Finally, we wish to stress that wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so that they can be enjoyed by all of us.

Thank you for your consideration of our concerns. Please keep us informed of progress on designating Nevada BLM wilderness.

Sincerely,

Ron Guenther
Conservation Chair
For the Sierra Club - Redwood Chapter

COMMENT LETTER 26

SIERRA CLUB
Toiyabe Chapter – Nevada and Eastern California

January 2, 1985

Kemp Conn, Manager
BLM/Las Vegas District
PO Box 26569
Las Vegas, NV 89132

Dear Manager Conn,

On behalf of the Public Lands Committee of the Toiyabe Chapter of the Sierra Club, I would like to add these comments on the Caliente Wilderness EIS to other Sierra Club comments.

1 Clover Mountains. (89,000 ac.) The Public Lands Committee supports the Wilderness Accent Alternative along with enlargement of the boundaries in the north near Fife Spring in order to include the entire Cottonwood Canyon drainage basin. I am not aware of any other desert WSA which includes an entire watershed. Outstanding wilderness values and opportunities for primitive recreation abound in this WSA. No significant adverse impacts to minerals or other resources were found in the environmental impact analysis and manageability is good.

Delamar Mountains. (102,490 ac.) The PLC disagrees with the negative recommendation of the Preferred Alternative and supports the Wilderness Accent Alternative which successfully addresses the actual manageability problems and mining and right-of-way conflicts identified in the EIS. It is impossible for us to 2 believe the BLM argument that opportunities for solitude are poor in 102,490 acres. A serious concern of hikers in similar areas is becoming separated from a group and not being able to find other members, due to the large acreages involved. We believe that the high escarpments as well as the cherrystemming of the Pony Well Road will eliminate most of the actual ORV problems.

3 At this point, we would like to question the apparent BLM assumption in the analysis of this WSA and others that because a WSA is susceptible to ORV use, it is an insoluable management problem. For one thing, there is not much ORV use going on today in these areas. The EIS does not support the assumption that ORV use is going to greatly increase in the future. Seconly, just because an area is not straight up and down does not mean it is unmanageable. Not all designated wilderness areas under the management of other federal and state agencies are mountainous, so why can't BLM recommend some gentler country such as bajadas as wilderness? Thirdly, the Wilderness Act does not specify that wilderness area candidates have to be self-enforcing. Motorized vehicle violations do occur in designated wilderness areas, but not regularly. BLM should expect some violations, but not eliminate an area from all wilderness consideration bec

LAS VEGAS GROUP
P.O. Box 19777
Las Vegas, Nevada 89119

To explore, enjoy, and protect the wild places of the earth . . .

GROUP
P.O. Box [illegible]
University Station
Reno, Nevada 89507

COMMENT LETTER 26

the fear that some problem may occur in the future. And last of all, BLM is assuming the worst - that ORV users will violate wilderness boundaries if they can. I believe BLM is doing a great disservice to responsible ORV users by this assumption. The EIS provides no documentation that justifies this attack on the integrity of ORV users of the public lands. I strongly believe that most ORV users will honor wilderness boundaries, especially since over 85% of the entire Resource Area remains open to ORV use, even if all our wilderness recommendations are accepted by BLM!

Meadow Valley Range. (166,500 ac.) The Committee supports the Wilderness Accent Alternative. The areas eliminated from the entire WSA also eliminate the majority of manageability problems and conflicts. The remaining conflicts are far outweighed by the benefits of including the broad bajada on the Eastern edge, possibly the first such bajada to be recommended for inclusion in the national wilderness preservation system. (See ORV comment on the Delamar WSA).

4 Mormon Mountains. (123,130 ac.) The PLC supports the Wilderness Accent Alternative for this WSA. The acreage recommended in the Preferred Alternative is grossly inadequate to protect the outstanding wilderness values. Manageability problems are excessively overestimated, especially with wildlife management requirements. The ambitious HMP for big horn sheep is very shortsighted, as the necessary roads to carry out such a plan will open up the entire previously isolated area to human disturbances. This "conflict" also directly contradicts the Environmental Assessment written for the HMP which declared no significant conflicts between wilderness designation and the proposed habitat improvement projects. The restricted boundaries in the Preferred Alternative are arbitrary and capricious, cutting across ridges and canyons and impossible to locate on the ground.

South Pahrock Range. (28,395 ac.) The Sierra Club is very plesed to support the Preferred Alternative for this WSA as it successfully protects the outstanding wilderness values present. The area has very few manageability problems and no significant mineral or other conflicts.

Although we did not always agree with the reasoning, we would like to express our appreciation of a well-written and presented Caliente wilderness EIS. The common-sense handling of the mineral evaluation was especially valuable to the reader in uderstanding which mineral conflicts were real and which were based on speculation only. The maps were clear and understandable, as was the prose, overall.

Thank you for considering our comments.

Sincerely,
Rose Strickland
Rose Strickland, Chair
Public Lands Committee

2

RESPONSE LETTER 26

Response to Letter 26

1. Your proposed adjustment on the northwestern side of the Clover Mountains WSA was given consideration. We have not made the adjustments on the borders of the WSA because present BLM policy discourages adding new areas out side of WSAs during the final study phase. In addition, preliminary indications were that a conflict with an area of higher mineral potential may be created on the norhtwestern side. These additions can be considered during ensuing planning cycles..

2. The revised EIS includes the fact that opportunities for solitude are present in this WSA, and range from low to outstanding.

3. The final EIS has been revised to eliminate manageability as a criterion factor for making suitability determinations because it is not an environmental issue. It will be considered in the Wilderness Study Reports. Possible ORV use and potential resulting impacts for the various alternatives have been discussed within Chapter 4 of this document.

4. The final EIS has been revised to eliminate manageability as a criterion factor for making suitability determinations. The relationship between bighorn sheep habitat projects and wilderness values is analyzed in the rewritten EIS in Chapter 4.

   With reconsideration of the Mormon Mountains WSA recommendation, it became evident that the alternative initially chosen was not fully acceptable. The new recommendation or the Proposed Action is the Wilderness Accent alternative which resolves the shortcomings which you identify. In addition, the HMP projects are being reevaluated, and those which are being proposed are designed to be compatible with wilderness preservation goals.

SIERRA CLUB
Toiyabe Chapter – Nevada and Eastern California

December 31, 1984

Mr. Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas NV 89126

Dear Mr. Conn:

The Las Vegas Group, Toiyabe Chapter of the Sierra Club, has completed a careful analysis of the Caliente Draft Environmental Impact Statement (CDEIS) and is pleased to provide its comments on the document. The issue of wilderness is indeed an important one and well justifies the care, time, and effort which the BLM and its study team are expending on this effort.

I think you understand our concern for the non-renewable nature of wilderness at a time in our local, state, and national history when pressures on this resource are becoming particularly acute. These pressures will increase apace with growth of the Las Vegas and southern Utah population centers. Our mineral entry laws do not offer suitable consideration of the market and development potential of mineral resources in decision making except through the unique wilderness review program as exemplified by this DEIS. We can therefore expect an accelerating destructive and often frivolous impact on ecosystems and aesthetic landscapes except where wilderness has been established by law.

We wish to make a clear distinction between two classes of non-renewable resources. On the one hand are energy and mineral commodities which are always available for exploitation as long as they remain in the ground. Low grade ores or ores of low potential value or low marketability should remain undisturbed until more suitable sources have been developed. On the other hand is wilderness and its associated resource values which cannot be replaced once destroyed by energy and mineral exploitation. The DEIS considers wilderness designation a long-term commitment of resources (pg. 4-1) but, unlike the category of energy and minerals, its designation does not have an irrevocable effect upon the opposite class of non-renewables. If we have learned anything from history, it is that "irrevocable" laws of democratic government can and will be changed when the need is perceived by citizens to be sufficiently great. In the long term, then, the existence of wilderness is a test of the

---

permanence of the nation's resolve on the relative values of resources. This may seem at first too philosophical to be of consideration in local or regional decision-making; but where much doubt exists as to the direction one should take in choosing alternatives, it clearly seems to us that it is best to risk erring on the side of wilderness. Any error that may result from such a decision can be corrected in the future, but the same cannot generally be said of an error made in favor of mineral development once such development is under way.

1 The DEIS shows that based on information now available, there are no significant conflicts with potential mineral and energy commodities in any of the five WSA's. Mineral surveys are to be conducted only on the Preferred Alternative, however. It seems therefore prudent that unless there are other compelling reasons to do differently, the Preferred Alternative boundaries at the DEIS stage of the process should tilt towards a larger portion of each WSA. Doing so assures the best mineral data possible for determining recommendations of the Final EIS and for the ultimate decisions of Congress.

The Las Vegas Group is especially pleased with the approach used in the DEIS for setting thresholds for significant impacts, especially with respect to the impacts of wilderness designation on energy and minerals. The approach used with respect to energy and minerals is an extension of the useful and proven concept found in the California Desert Plan. Rational thinking leads to easy understanding of the desirability of impact thresholds based upon both commodity significance and occurrence potential. In Nevada, at least, this enlightened approach has apparently not heretofore been used. We certainly applaud the District's innovation in using this approach. We feel that further analyses of this kind should adopt the same methodology. Yet we think it could be improved upon by the way certain minerals like gold are placed in the commodity group hierarchy (Table 3-1, pg. 3-4). This rationale results from the relatively low value of gold in industry and within that context the special environmental problems when it is mined by open pit or placer techniques. We think gold mined by these methods should be relegated to Mineral Group 3 or lower, quite independent of the 50% Import Reliance. This is because its value fluctuates in a boom and bust manner from one year to another and so does its Import Reliance. By so classifying gold minerals, wilderness designation would result in Significant Adverse Impact (SAI) upon this industry only under conditions of its having a very high occurrence potential. Thus, areas of high quality wilderness would more likely be designated at the expense of the frivolous boom-cycle gold extraction which would result in permanent wilderness destruction.

2 With respect to the discussion of rural social values (pg. 3-12) and the general impact of wilderness decisions on these values (pg. 4-10), we suggest a more dynamic evolution in rural thinking than that proposed, especially with respect to longer time periods. The DEIS studies show rural people generally prefer the status quo for their environment (which currently includes much de facto wilderness). They currently may perceive little threat to that environment from such factors as heavy ORV recreation spillover from the Las Vegas area and partly for this reason they sometimes view wilderness designation as an unnecessary restriction. But as such impacts become more pervasive with growth of the Las Vegas area, we suggest that more of the rural people will shift towards endorsing protective measures such as wilderness designation. We think that shift in thinking is already beginning to be noticed. These folks are not blind to what is happening to wilderness closer to Las Vegas.

The DEIS (pg. 3-13) states the attitude of Nevada ranchers to wilderness designation as being in general negative. Experience throughout Nevada suggests that at present a representative rancher opinion for or against wilderness is difficult to come by. Rancher opposition to wilderness often derives from misinformation about the effect of designation upon ranch operations, and we feel that part of this stems from the propaganda of organizations with a philosophical mindset against the program. We question solid representation of industry thinking by the Nevada Cattlemen's Association, and we believe those ranchers who really understand their rights to operate within wilderness will support it.

National Forests in Nevada occupy only 7% of its area. While adequate wilderness designation in these lands is crucial, we must expect our BLM lands to provide the major portion of the state's wilderness. This is true not just because of the vastness and lack of conflicts with wilderness on these lands, but also because the desert areas contain the most representative lands which we associate with Nevada. This is especially true in Southern Nevada where the National Forest opportunities for wilderness are confined to one small area. The Caliente RA contains some of the most thrilling opportunities for wilderness to be found in the state. These will become increasingly important as population pressures grow and non-designated areas lose their wilderness values with time.

Our comments now turn to consideration of each of the resource area's five Wilderness Study Areas (WSA's).

Clover Mountains (NV-050-0139): This WSA provides exceptionally high quality primary and secondary wilderness values. These are well identified and discussed in the DEIS. They include colorful and rugged rock formations, open basins and narrow canyons, ponderosa pine stands, and, perhaps most significant of all, a nearly complete flowing stream basin. Conflicts with other resources, including minerals, are very low.

3 The Wilderness Accent Alternative improves upon the Preferred Alternative in more completely enclosing the entire stream drainage basin by slightly expanding the northwest boundary to a defensible and logical position on the basin's rim. We urge consideration of a similar small enlargement of the current Wilderness Accent Alternative on the north to incorporate Fife Spring. We are unaware of any resource conflicts that would bar this action and the BLM's analysis has not identified any. It appears that the original roadless inventory should have included this small additional area and that not doing so was an oversight due to a mapping error rather than a conscious decision. Thus the entire drainage basin of Cottonwood Canyon would be protected from activities outside the wilderness that could cause erosion or siltation problems within this unique stream environment. The concept of complete inclusion of a drainage basin within protective wilderness has scientific study significance as well as aesthetic appeal. The canyons within this proposal but outside the Cottonwood watershed provide scenic opportunities for augmenting wilderness experiences. Because of water availability, the area is especially attractive for longer term backpacking or horse packing adventures. The old ranch ruin in the lower canyon should be left intact because of its pioneer historic significance which enhances wilderness values. Management is not a significant problem even in the lower Cottonwood drainage partly because of Union Pacific Railroad structural restrictions which are likely to continue indefinitely and could be assured by contractual or cooperative agreements. Much of our opinion of this area has come about through study from all of the closest boundary roads and by backpacking the full length of the WSA from Ella Mountain south to Meadow Valley Wash. It is indeed an impressive wilderness.

South Pahroc Range (NV-050-0132): In consideration of its astounding lack of conflicts with other resources, its pristine character, uniquely beautiful land forms, exceptional topographic irregularity, unusual vestigial stands of stunted white fir, and particularly good management opportunities, we fully endorse the Preferred Alternative for this WSA. This alternative fully resolves even the minimal potential conflicts which may arise. We have availed ourselves of excellent backpacking opportunities within this unit and have explored it from several entry points along both the east and west flanks. We have found it especially attractive for day hiking on several occasions. Water may be perennial at one or more locations and it certainly is available in the winter and spring seasons. The wilderness would be readily accessible from Las Vegas with only a short stretch of generally good dirt roads. Its characteristics produce excellent primary and secondary wilderness qualities as well described in the DEIS.

4 Delamar Mountains (NV-050-0177): This area has the potential of providing an austere, remote wilderness experience on steep escarpments, upon a juniper sprinkled plateau and in deep canyons that twist their way downward through the plateau surfaces. We feel this area would never become heavily occupied at any single time because of its characteristics; but for those who want to really get away from it all, their success in this range will likely stem from a singular lack of crowding enhanced by its large size and topographic diversity. The DEIS attempts to create a case in the Preferred Alternative for a no wilderness decision. Yet there seems to be an inconsistency, for the usually most wilderness restrictive alternative of all, the Resource Development Alternative, still manages to resolve all resource conflicts and comes up with a sizeable suitable wilderness consisting of 38% of the WSA. Even the All Wilderness Alternative identifies only one serious conflict, that being the need for a utility corridor along the westernmost edge of the WSA. A speculative potential range conflict is discussed in the DEIS but seems capable of resolution. It seems quite feasible to provide a wilderness area here that excludes management problem areas on the bajadas around the west, south, and east, and cherrystems the Pony Well Road. The court ordered water source could be provided by a pipeline or catchment reservoir in the road corridor. There would be no significant resource conflicts. Any recommendation to seriously reduce in size or eliminate this WSA from farther consideration seems to be entirely arbitrary and supported neither by the DEIS analysis nor by the BLM's Wilderness Study Policy which must be followed in the discharge of the FLPMA mandate for evaluation of roadless areas for wilderness potential. Our field studies have included exploration of the crest area of the central Plateau and the intricately eroded white tuff layers on the face of the western escarpments.

Meadow Valley Range (NV-050-0156): In this WSA we agree with the assessment offered for the Wilderness Accent Alternative, pointing out the lack of significant impact with mineral or other resources in any part of this alternative. The alternative adds the interesting Bunker Hills with their higher wilderness values and the central bajada areas to the Preferred Alternative's mountainous backbone. We advocate this because of the lack of conflicts, but also especially because of the singular opportunity to include a manageable bajada protected from easy ORV entry by the nearly impenetrable embankment bordering the WSA along the edge of Meadow Valley Wash. This addition would be further protected from ORV entry by the stream and railroad right-of-way within Meadow Valley Wash. This is an outstanding opportunity to include a bajada, a land form not well represented in the Nevada assemblage of preferred wilderness alternatives because of typical perceived manageability problems. The unspoiled bajada would provide a foreground for the outstandingly beautiful western ridge of mountains and would considerably improve the configuration of the proposal by more than doubling its width along the southern two thirds of its length. The Wilderness Accent Proposal offers some outstanding opportunities for wilderness experiences in a desert range of vast proportions. A further benefit resides in the resulting nearly contiguous association of a Meadow Valley Mountains Wilderness with the Mormon Mountains WSA, broken only by the well-concealed and sparse developments within the deep, narrow Meadow Valley Wash. The effect would be to provide much enhanced wilderness opportunities for this combination of areas. We have studied the range from all sides except the Farrier Wash boundary on the south, including hiking reconnaissance in the vicinity of Avertt Reservoir, on upland areas bordering Hackberry Canyon, and through the pass in the western mountain ridge at the head of the Hackberry Wash drainage. This has given us a fairly good opportunity to catch the wilderness flavor of this impressive unspoiled area. We urge a recommendation for the nearly conflict-free Wilderness Accent Alternative.

Mormon Mountains (NV-050-0161): Of all the Caliente WSA's, this one exhibits the most dramatic wilderness features. The drainage pattern is radial from a central mountain core, and hence the WSA is roughly circular, a good configuration. The range dominates the skyline from any direction and is characterized by a welter of craggy peaks, deeply incised twisting canyons, and long cliff-bordered ridges. Wilderness opportunities range from easy hiking in canyon washes to challenging cross-country climbs of many peaks like Moapa or Mormon, and to loop backpacking routes that involve crossing ridges between canyons. These outstanding wilderness qualities are augmented by the sense of solitude that pervades the range, occasional military overflights notwithstanding. It has unique and valuable secondary attributes that enhance the opportunities for wilderness enjoyment. These include the exceptional cave system, the inclusion of three ecosystem life zones (the only Caliente RA WSA with this diversity, pg. 3-14), a remnant stand of large ponderosa pines, excellent wildlife viewing opportunities, remarkably lush desert vegetation that includes giant specimens of Yucca shidigera, and the easy discovery of extremely numerous prehistorical cultural remains such as roasting pits, petroglyphs, pictographs and pueblo structures. This is the closest of the Caliente WSA's to the Las Vegas area and also is quite close to growing Southern Utah communities.

5 Of all the proposed actions discussed in the DEIS, we find this one for the Mormons to be the most difficult to understand. The tiny core area delineated by the Preferred Alternative seems to us preposterous. Our considerable experience in this range and our reading of the DEIS discussion points to a logical recommendation no smaller than the Wilderness Accent Alternative. Our logic follows.

The boundaries of the Preferred/Resource Development Alternative are irrational. They include the central peaks but very little of the main mountainous mass. Instead, they cut capriciously across ridges and canyons leaving out very large areas of quality wilderness. These boundaries do not appear to have been based on either conflict resolution or on easily identifiable geographic features. As conceded in the DEIS (pg. 4-17a bottom), definition of boundaries, both descriptively and on the ground, will be difficult and will lead to confusion in this alternative. Even BLM personnel newly assigned to work with this area, let alone the public, would have difficulty in familiarizing themselves with these boundaries.

The Wilderness Accent Alternative boundaries appear logical and seem to remove all the significant conflicts while including nearly all of the outstanding wilderness. Page 4-40 attests to the elimination of manageability problems on the bajadas and the worst of the cherrystem road influence in these areas. The DEIS agrees with our on-the-ground assessment as to the relatively

minor and local nature of cherrystem road impacts (pg. 4-40b). A casual look at a map devoid of contours makes the cherrystem roads appear far more intrusive than viewing them on topographic maps or by looking at them on the ground. Without exception, these roads follow radiating drainage features. The DEIS points out the extensive distances between these roads. Topographic maps, or even maps within this DEIS (Ch. 3), adequately indicate the numerous major drainages lying between any two adjacent roads. The roads themselves are rough and infrequently used. In addition, their general location in the bottoms of deeply incised drainages leads to extremely limited visual impacts on even the immediate surrounding areas.

Mineral conflicts are minimal and confined largely to the Whitmore Mine area. But even here the mineral potential is too speculative to outweigh the outstanding non-speculative wilderness assets (pg. 4-41a).

The DEIS at various points makes reference to the increased difficulty of carrying out HMP projects within wilderness boundaries (for example, pg. 4-27b bottom). Since the integrated AMP/HMP for this range is an ambitious one, the implications appear to have been that the HMP exerted a strong influence on the Preferred Alternative. We note, for instance, that the 25% of the HMP projects that are completed lie within the Preferred Alternative borders while the uncompleted projects (75%) lie largely within the remaining area of the Wilderness Accent Alternative. If planning was adequate in the HMP, however, no real problem should exist. Indeed, the HMP Environmental Analysis (EA) arrived at a conclusion of no significant impact on the environment (including wilderness); and had there been such an effect determined, a full EIS would have been required. The implication is that the HMP is more difficult to implement within the framework of wilderness management and that this has influenced the decision towards the Resource Development Alternative, which excludes from wilderness the projects yet uncompleted. A reading of the BLM's Wilderness Management Policy does indeed call into question the propriety of parts of the HMP, especially its more ambitious projects. This follows from the requirement for management to "seek a natural distribution, number, and interaction of indigenous species....Natural processes will be allowed to occur...as far as possible without human influences....[W]ildlife species...should be allowed to maintain a natural balance with their habitat and with each other." The nine large guzzlers still to be installed would seem to be a rather heavy handed approach to "natural processes" and "natural balance" with the habitat.

6 Looking at this from another aspect, the drawing in of boundaries to exclude most of these projects may defeat the goals of the HMP anyway. Page 4-27b partially addresses this in mentioning a scenario of increased numbers of roads to guzzlers with the resulting increase of hunters and visitors to the detriment of wildlife. Even guzzlers already constructed within the Preferred Alternative boundaries would experience heavier visitation as the inevitable maintenance ways or roads to the in-drawn boundaries lead to within easier walking or horseback distance of these devices. The entire sheep habitat would experience greater density of human intrusion with the Preferred Alternative, both within and without the wilderness. Page 4-27b also advances a possible need for more numerous small guzzlers rather than the few large ones. A case could be made for this in terms of the possibility of developing natural catchments and providing a more distributed pattern of water availability. Even assuming, though, that water development projects occur as planned at the locations indicated on the Wildlife Improvements map (Ch. 3), it appears that several of these would be close to the Wilderness Accent Alternative border. With relatively little adjustment of guzzler locations to points outside the border, these installations could be accommodated with little impact on wilderness. Even if built as outlined in the HMP, they would be located for the most part within about one mile of the boundary, thus minimizing the need for non-conforming methods in their installation and maintenance.

All wildlife would benefit greatly from the Wilderness Accent Alternative. Essentially all the WSA's deer, bighorn, and crucial tortoise habitat would be better protected within wilderness as would much of the crucial habitat for quail.

Many more of the cultural resources would be better protected within the Wilderness Accent Alternative (pg. 4-11a).

Our on-the-ground assessments of wilderness possibilities within the Mormons have involved driving all the roads and some of the ways. Those we did not drive were walked out except for the long way entering from the northern boundary. Numerous enjoyable hikes were made into the WSA in addition to some memorable backpacks. The principal peaks climbed included Mormon, Moapa, and the central ridge east of Mormon Peak. The peripheral roads were all driven and the interior studied from

numerous locations. The range is prominently featured in John Hart's book Hiking the Great Basin. Moapa Peak was "discovered" five years ago by the Desert Peak Section of the Angeles Chapter, Sierra Club, and was subsequently added to its list of qualifying peaks. It has long been considered one of the most rewarding and challenging climbs in the Las Vegas Group's area of interest.

The Mormon Range ranks high in quality among Nevada's potential wilderness areas. It deserves a quality wilderness of 123,130 acres delineated by the Wilderness Accent Alternative.

Summary: Our recommendations are for the establishment of wilderness units in all five WSA's. These would include a slightly enlarged Wilderness Accent Alternative for the Clover Mountains (about 88,000 acres); Wilderness Accent Alternatives for the Mormon Mountains (123,130 acres), Meadow Valley Range (166,500 acres), and Delamar Mountains (102,490 acres); and the Preferred Alternative for the South Pahroc Range (28,395 acres). The total would then be about 508,000 acres. We feel that each of these areas would make an outstanding addition to the National Wilderness System. Each would cost little or nothing in terms of resource development potential foregone since there are no appreciable conflicts. Additional benefits derive from the protection afforded to extensive cultural resources and to habitat for such human-sensitive species as bighorn sheep, desert tortoise, and various raptors.

Sincerely,

Anita Bowen
Conservation Chair

Howard Booth
Howard Booth
Wilderness Chair

Response to Letter 27

1. Newer data are now available for minerals. The Proposed Actions were developed and evaluated for mineral potential to as closely approximate the foreseeable wilderness recommendations as possible. In some cases where recommendations have changed, it may be necessary to do supplemental surveys.

2. The section on rural social values has been deleted along with the general discussion within which it appeared, as the rewritten EIS has been focused on site-specific issues.

3. Your proposed adjustments were given consideration. We have not made the adjustments because present BLM policy discourages adding areas outside of WSAs during the final study phase. In addition, preliminary indications were that a conflict with an area of higher mineral potential may be created on the northwestern side. Congress will make the final decision to accept or modify the recommendations of the Executive Branch relative to the Clover Mountains WSA. These additions can be considered during ensuing planning cycles.

4. Although the Wilderness Accent and the Resource Development alternatives identify most of the area within each as free of conflict, the Proposed Action recommends the entire area as nonsuitable for designation as wilderness because the area, taken as a whole is not exceptional. Vegetation is low-growing, providing little or no screening over the majority of the WSA. Except in the canyons and cliffs, topographic screening is limited over the central portion of the Resource Development Alternative. Overall, scenic values are rather ordinary when compared to regional features. Known cultural resources are, likewise, very limited in the uplands portion represented by the Resource Development alternative. There is a dearth of known prehistoric archaeologic sites. Distinctive destination points are relatively limited. Few attractions for activities like rockhounding and photography exist when taken in a regional context.

   Removing the areas with lower wilderness values around the periphery, the areas prone to ORV use (lower portions of canyons from the south), and the area within the zone of influence of activities on the Pony Well road, leaves an irregularly shaped, indented wilderness area (Resource Development alternative).

   Grazing management in this area has been difficult due to the area's sparse resources, which has resulted in litigation. Wilderness designation would render it even more difficult to comply with the settlement requirements which arose from that litigation.

   For these reasons, in the absence of prevalent countervailing wilderness values, this WSA has been recommended nonsuitable for wilderness designation.

5. With reconsideration of the Mormon Mountains WSA recommendation, it became evident that the alternative initially chosen was not fully acceptable. The new recommendation or the Proposed Action is the Wilderness Accent alternative which resolves the shortcomings which you identify.

6. The EIS identifies the likelihood of habitat erosion in portions of areas not designated as wilderness. A new wilderness-compatible approach has been implemented for wildlife projects. Projects are trending towards smaller sizes use of natural slick rocks for catchments. This has reduced conflicts with preservation of wilderness values to acceptable levels. In combination with the changed suitability recommendation, both wildlife and wilderness resources will be better served.

COMMENT LETTER 28

WHOA!

WILD HORSE ORGANIZED ASSISTANCE
INC.
A Foundation for the Welfare of
Wild Free-Roaming Horses and Burros

P. O. Box 555
Reno, Nevada 89504
Telephone [illegible]
Area Code 702
851-4817

BOARD OF TRUSTEES
DAVID R. BELDING
JACK C. McELWEE
GORDON W. HARRIS
BELTON P. MOURAS
GERTRUDE BRONN, Honorary
In Memoriam
LOUISE C. HARRISON
VELMA B. JOHNSTON, "Wild Horse Annie"

January 5, 1985

Mr. Kemp Conn, District Manager
Bureau of Land Management
Post Office Box 26569
Las Vegas, Nevada 89126

Re: Caliente Wilderness Draft Environmental Impact Statement

Dear Mr. Conn:

Thank you for the opportunity to comment on the Draft Wilderness Plan.

1 Wilderness enhances the wild horse resource and protects their habitat where both occur together. WHOA requests that all recommendations for wilderness to Congress contain the herd management plans for wild horses as an existing resource.

WHOA supports the WILDERNESS ACCENT ALTERNATIVE FOR:

Delmars Meadow
Valley Range
Clover Mountains
Mormons

WHOA supports the PREFERRED ALTERNATIVE FOR:

Pahroc Range

Most sincerely,

Dawn Y. Lappin

Dawn Y. Lappin (Mrs.)
Director

RESPONSE LETTER 28

Response to Letter 28

1. Herd Management Plans do not exist for these WSAs.

COMMENT LETTER 29

THE WILDERNESS SOCIETY
FOUNDED IN 1935

November 5, 1984

Mr. Kemp Conn
District Manager
P.O. Box 26569
Las Vegas, NV 89126

Dear Mr. Conn:

Thank you for the opportunity to comment on the Caliente Draft Environmental Impact Statement.

We are pleased with the wilderness recommendations for Clover Mountains and South Pahroc Range. This action will protect and preserve Clover Mountains' Cottonwood Creek complex, the sole perennial creek system in the five areas studied, as well as the outstanding recreational and solitude opportunities of both areas.

We are, however, disappointed with the recommendations for the remaining three areas, Delamar Mountains, Meadow Valley Range and Mormon Mountains. Our comments are as follows:

Delamar Mountains

1 Nowhere in the Wilderness Act or in FLPMA does it say that the "influence of outside sights and sounds" serves as a criteria for wilderness or non-wilderness designation. The proximity of Highway 93 should not be a basis for the non-wilderness recommendation for the Delamar Mountain WSA. We also find the Environmental Consequences of the Preferred Alternative inadequate as stated in section 1502.16 of the National Environmental Policy Act. A more detailed description of environmental impacts is necessary, including both short and long term effects, irreversible or irretrievable commitments of resources, and effects on wildlife.

The Bureau of Land Management has determined that 65-70% of the WSA is unaffected by manmade features. The landscape and vegetation are diverse. The southern end boasts several "spectacular canyons." A visitor will find outstanding topographic screening and recreational activities. Special features include desert tortoise, prairie falcons, golden eagles and rare geologic formations and mesas. Designation of the Delamar Mountains as non-wilderness would result in the permanent loss of many of these resources. We encourage BLM to at least redefine the western boundary, and preserve the pristine and geological features of this area.

278 POST STREET, #400, SAN FRANCISCO, CA 94108
(415) 982 2795

COMMENT LETTER 29

Meadow Valley Range

Though over half the Meadow Valley Range WSA has been recommended as suitable, we still find this inadequate considering that 95% of the area is unaffected by manmade features. Excluding the eastern half from wilderness designation merely because future ORV problems may arise is not justifiable, especially since the Wilderness Accent Alternative states that "manageability seems to be a problem only where two large washes at Hackberry Canyon and Vigo Wash permit access up the washes themselves but not out of the wash." The DEIS states that "the unsuitable area has past mining exploration in the outstanding to moderate wilderness values in the Bunker Hills." The presence of mining claims does not preclude wilderness designation. Also, the extent and status of this mining activity -- both past and future -- needs to be defined.

BLM claims that most of the unsuitable area will likely remain undisturbed. We fail to see the point of not designating this as wilderness, and therefore ensuring that the area will remain in a natural state.

Finally, the proximity of this area to Las Vegas makes it an attractive wilderness candidate.

Mormon Mountains

We must admit we are puzzled at the small suitable recommendation for Mormon Mountains. Again, mining claims and the influence of outside sights and sounds do not preclude wilderness designation. BLM seems to be creating its own problems by drawing the boundary within the mountainous core. It would certainly be easier in terms of management to recommend the entire area suitable, especially since 2/3 of the surrounding 52,000 acres have outstanding wilderness values. BLM has chosen uses that may occur (range improvements and mining exploration) over outstanding wilderness qualities that presently do exist.

By designating most of the WSA nonsuitable, BLM is inviting vandalism of valuable cultural resource sites; these sites "would not have the added protection from vandalism and from salvage." This area is not only readily accessible from Las Vegas, but is already the most heavily visited of the five areas. Why not designate a larger wilderness area to accomodate an increase in recreational users. It makes no sense to make the fourth smallest wilderness recommendation on the most recreationally used of the five areas.

The impacts cited in the All Wilderness Alternative would be slight. In fact, an increase in bighorns, in conformance with the HMP, would occur. A wilderness designation thus could only be beneficial.

However, in the event that the preferred alternative should be adopted, we urge BLM to institute 43CFR 3000 regulations and/or ORV designations, so as to protect bighorn sheep, deer, tortoise and quail habitat.

COMMENT LETTER 29

Mr. Kemp Conn

November 5, 1984
Page Three

In summary, we request BLM increase its wilderness recommendations for the Delamar Mountains, Meadow Valley Range and the Mormon Mountains WSAs.* We also urge BLM to strictly conform to IMP regulations until such time that Congress makes its decision.

Thank you for considering our comments.

Sincerely,

Patricia Hodge

Patricia Hodge
Regional Director, California-Nevada

Jeri Galbraith

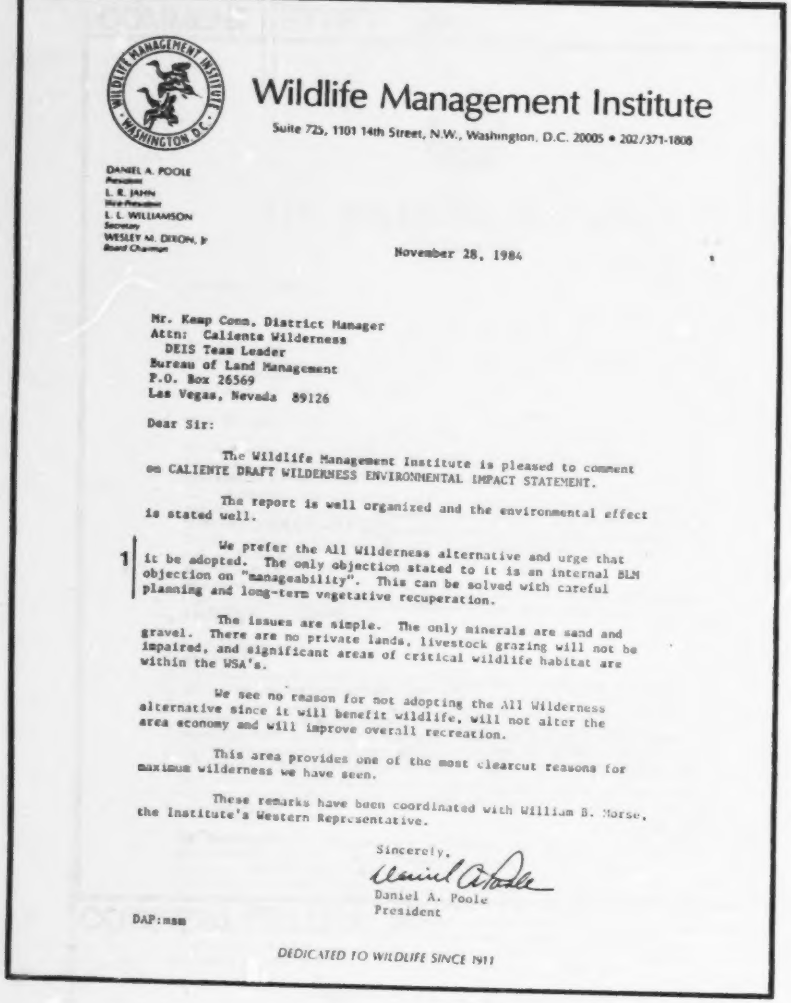
Jeri Galbraith
Administrative Assistant, California-Nevada

RESPONSE LETTER 29

Response to Letter 29

1. The EIS has been extensively revised to address your comments and those of others. In the process, references to outside influences have been deleted. It now includes a more detailed analysis of short- and long-term environmental effects. The Proposed Action analyses now contain sections on unavoidable adverse impacts, the relationship between short-term uses of man's environment and the maintenance and enhancement of long-term commitments of resources. Where wildlife would be affected by designating or not designating wilderness, a heading and analysis appears.

COMMENT LETTER 30



Wildlife Management Institute
Suite 725, 1101 14th Street, N.W., Washington, D.C. 20005 • 202/371-1808

DANIEL A. POOLE
President
L. R. JAHN
Vice-President
L. L. WILLIAMSON
Secretary
WESLEY M. DIXON, Jr
Board Chairman

November 28, 1984

Mr. Kemp Conn, District Manager
Attn: Caliente Wilderness
DEIS Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Sir:

The Wildlife Management Institute is pleased to comment on CALIENTE DRAFT WILDERNESS ENVIRONMENTAL IMPACT STATEMENT.

The report is well organized and the environmental effect is stated well.

1 We prefer the All Wilderness alternative and urge that it be adopted. The only objection stated to it is an internal BLM objection on "manageability". This can be solved with careful planning and long-term vegetative recuperation.

The issues are simple. The only minerals are sand and gravel. There are no private lands, livestock grazing will not be impaired, and significant areas of critical wildlife habitat are within the WSA's.

We see no reason for not adopting the All Wilderness alternative since it will benefit wildlife, will not alter the area economy and will improve overall recreation.

This area provides one of the most clearcut reasons for maximum wilderness we have seen.

These remarks have been coordinated with William B. Morse, the Institute's Western Representative.

Sincerely,

Daniel A. Poole

Daniel A. Poole
President

DAP:mam

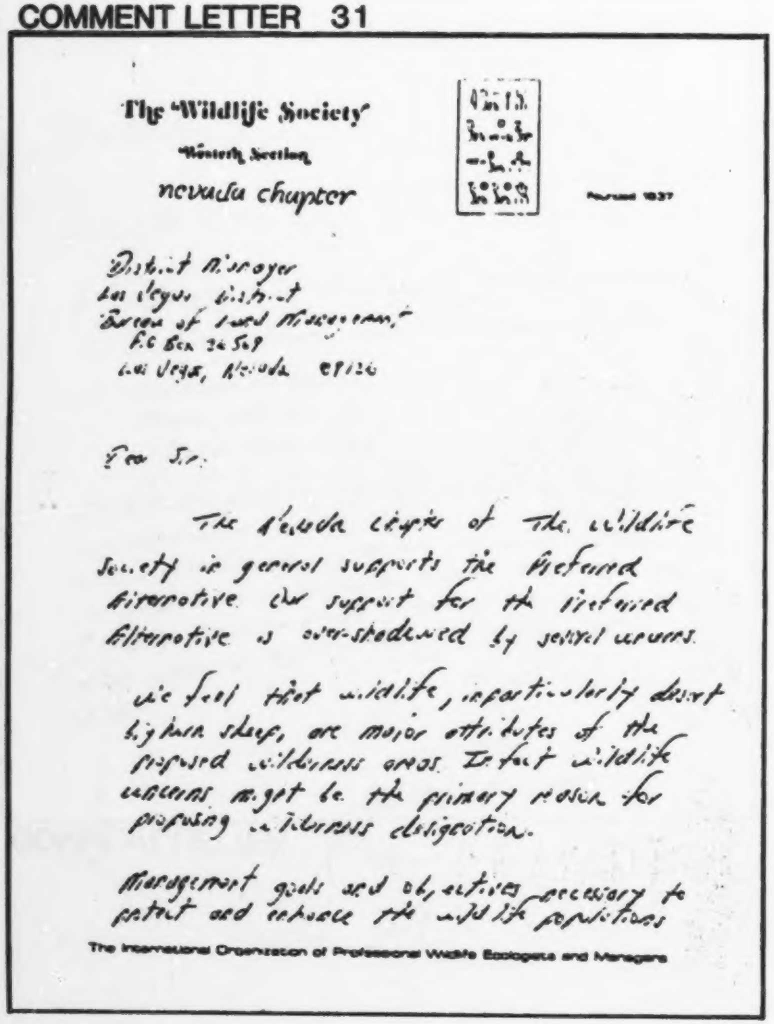
DEDICATED TO WILDLIFE SINCE 1911

RESPONSE LETTER 30

Response to Letter 30

1. In the rewritten EIS, manageability as a criterion has been removed insofar as making suitability recommendations is concerned because it is not an environmental issue. Manageability will be considered in the Wilderness Study Report.

COMMENT LETTER 31



The Wildlife Society
Western Section
nevada chapter
Founded 1937

District Manager
Las Vegas District
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Sir:

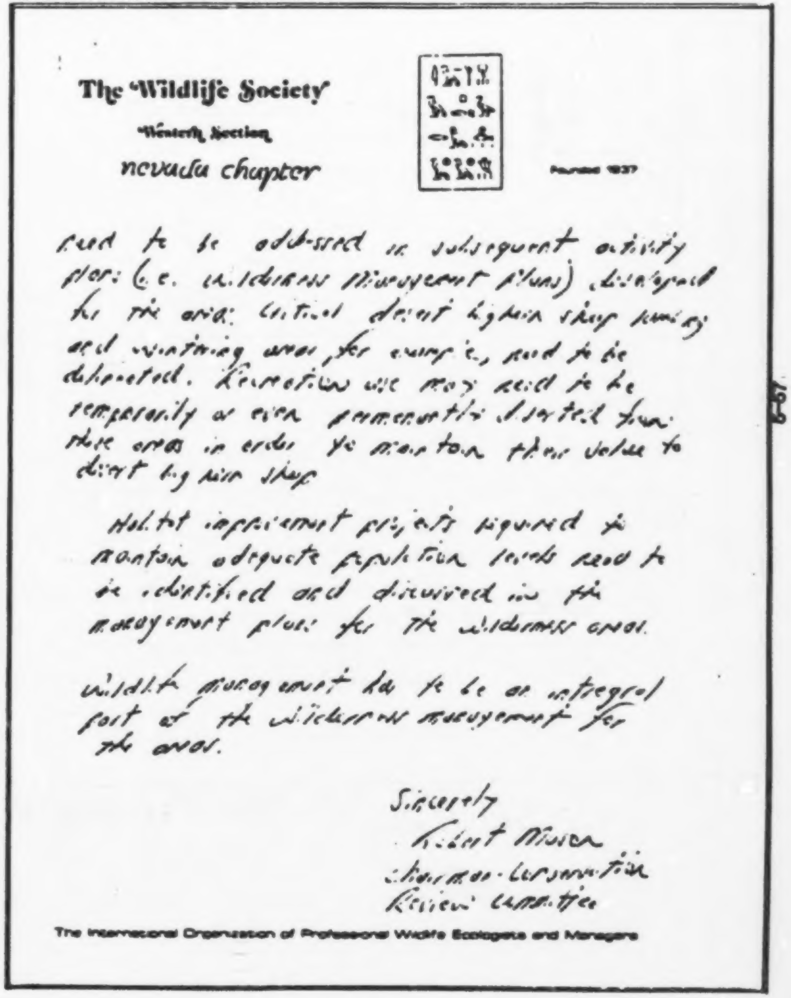
The Nevada Chapter of The Wildlife Society in general supports the Preferred Alternative. Our support for the Preferred Alternative is over-shadowed by several concerns.

We feel that wildlife, particularly desert bighorn sheep, are major attributes of the proposed wilderness areas. In fact wildlife concerns might be the primary reason for proposing wilderness designation.

Management goals and objectives necessary to protect and enhance the wildlife populations

The International Organization of Professional Wildlife Ecologists and Managers

COMMENT LETTER 31



The Wildlife Society
Western Section
nevada chapter
Founded 1937

need to be addressed in subsequent activity plans (i.e. Wilderness Management Plans) developed for the area. Critical desert bighorn sheep lambing and watering areas, for example, need to be delineated. Recreation use may need to be temporarily or even permanently diverted from these areas in order to maintain their value to desert bighorn sheep.

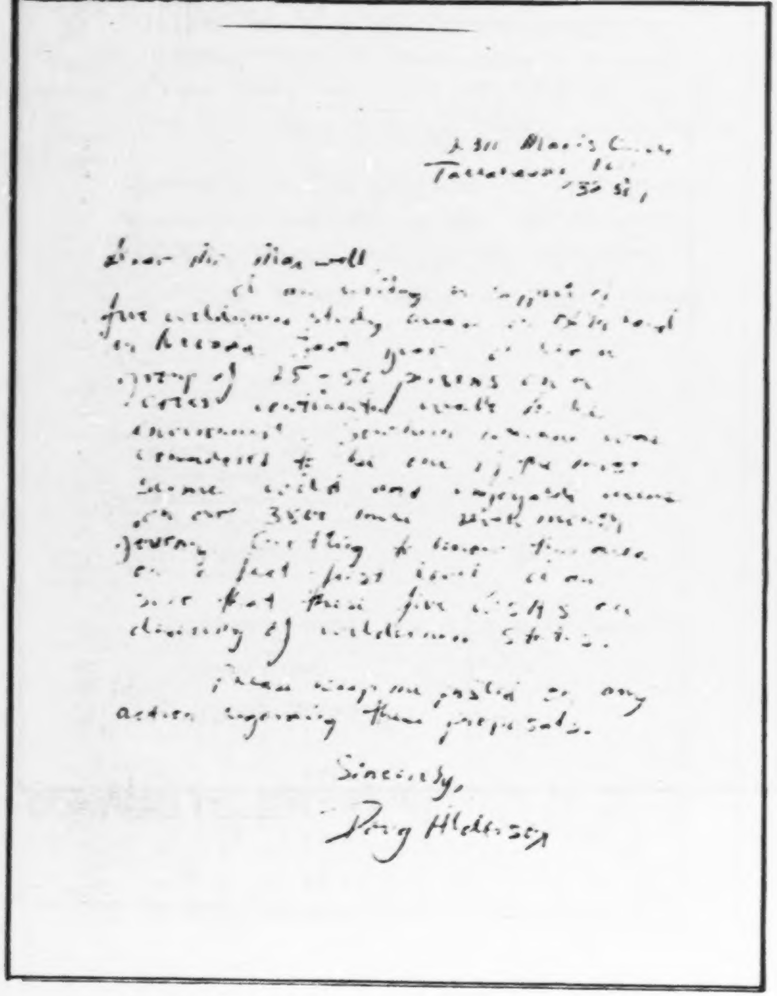
Habitat improvement projects required to maintain adequate population levels need to be identified and discussed in the management plans for the wilderness areas.

Wildlife management has to be an integral part of the wilderness management for the areas.

Sincerely
Robert Moser
Chairman-Conservation
Review Committee

The International Organization of Professional Wildlife Ecologists and Managers

COMMENT LETTER 32



2311 [illegible] Circle
Tallahassee, Fl.
32301

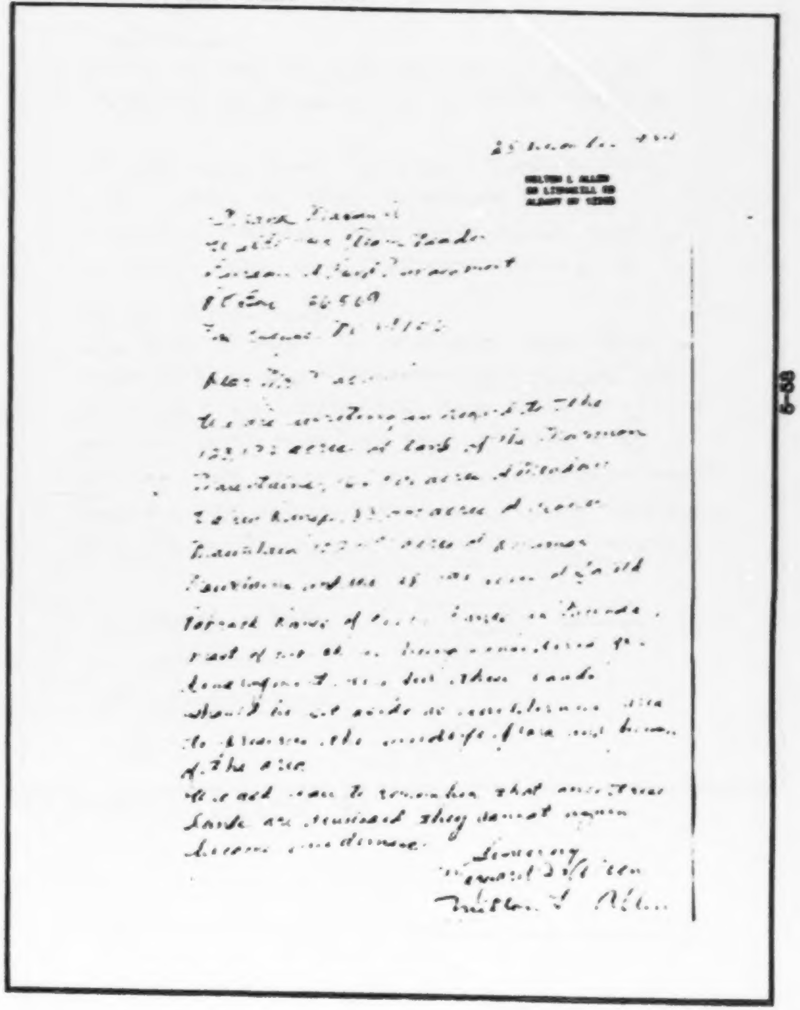
Dear Mr. Maxwell

I am writing in support of five wilderness study areas in [illegible] Arizona. Last year I led a group of 25-50 persons on a [illegible] continental walk for the environment. [illegible] was considered to be one of the most scenic, wild and enjoyable areas on our 3500 mile, [illegible] month journey. [illegible] to know this area on a foot-first level is an [illegible] that these five WSAs are deserving of wilderness status.

Please keep me posted on any action regarding these proposals.

Sincerely,
Doug Alderson

COMMENT LETTER 33



25 [illegible]

MILTON L. ALLEN
[illegible]
ALBANY [illegible]

Mr. [illegible]
Wilderness Team Leader
Bureau of Land Management
P.O. Box [illegible]
[illegible]

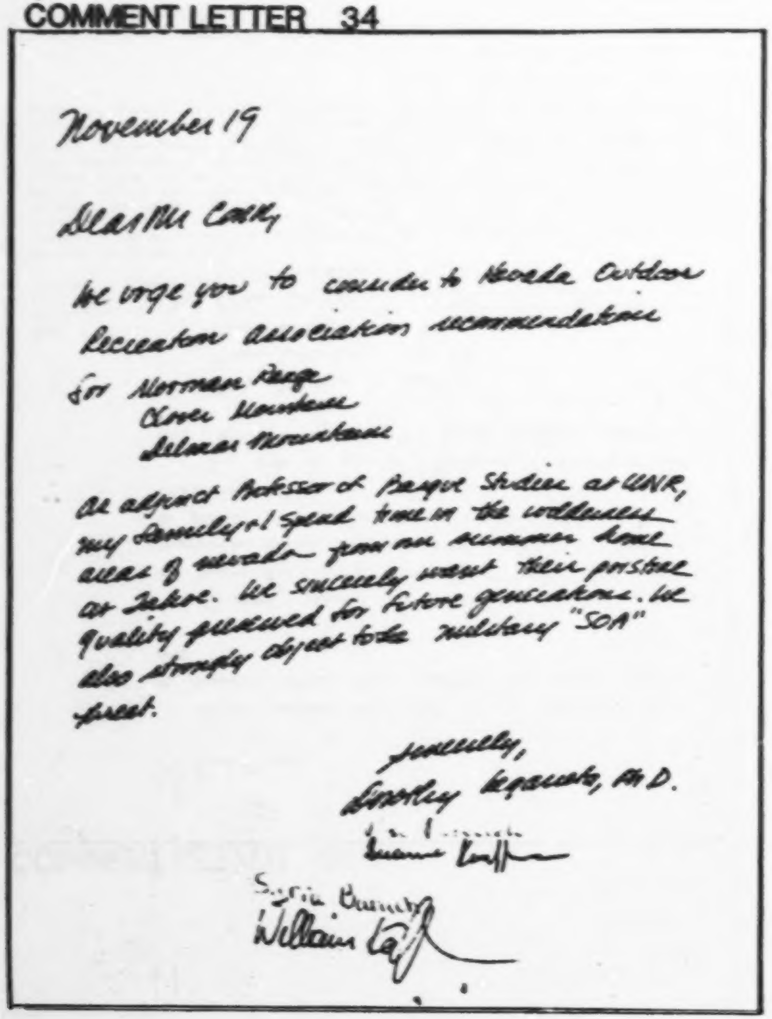
Dear Mr. [illegible]

We are writing in regard to the [illegible] acres of land of the [illegible] Mountains, [illegible] acres [illegible], [illegible] acres of [illegible], [illegible] acres of [illegible] and the [illegible] acres of [illegible] [illegible] of [illegible] lands in Arizona. [illegible] have considered for [illegible] feel these lands should be set aside as wilderness area to preserve the wildlife, flora and fauna of the area.

We ask you to remember that once these lands are developed they cannot again become wilderness.

Sincerely,
[illegible]
Milton L. Allen

COMMENT LETTER 34



November 19

Dear Mr Cathy

We urge you to consider the Nevada Outdoor Recreation Association recommendations for Norman Range
Clover Mountains
Delamar Mountains

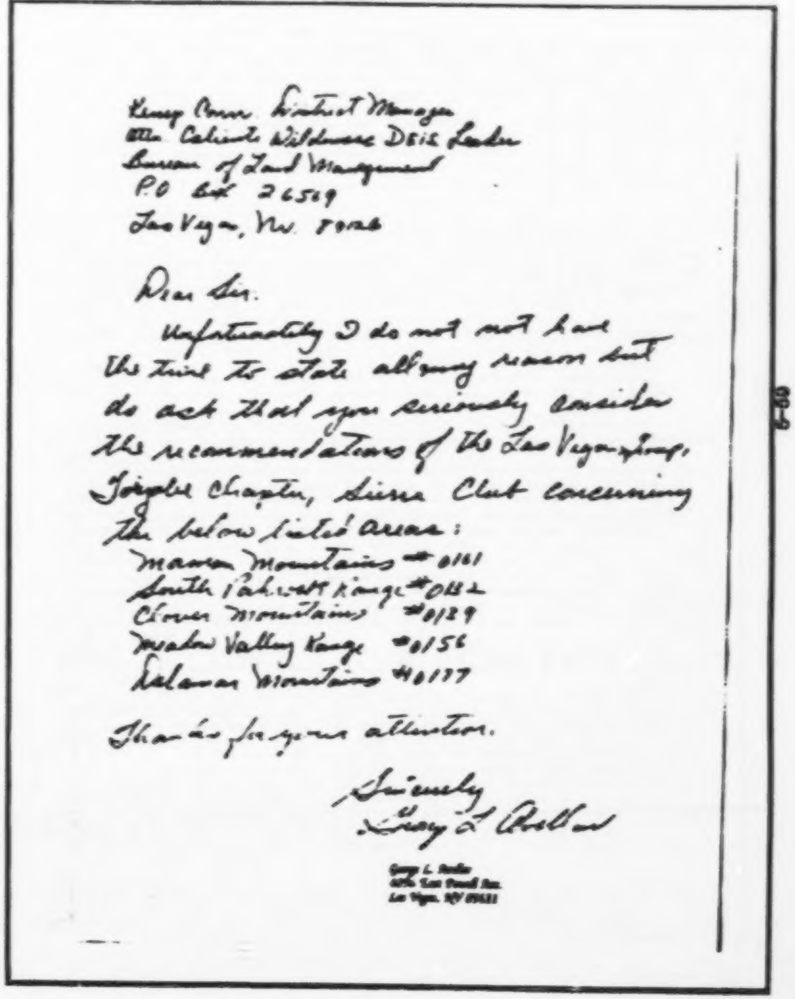
As adjunct Professor of Basque Studies at UNR, my family and I spend time in the wilderness areas of Nevada from our summer home at Tahoe. We sincerely want their pristine quality preserved for future generations. We also strongly object to the military "SOA" threat.

Sincerely,

[illegible], Ph.D.

William [illegible]

COMMENT LETTER 35



Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nv. 89126

Dear Sir.

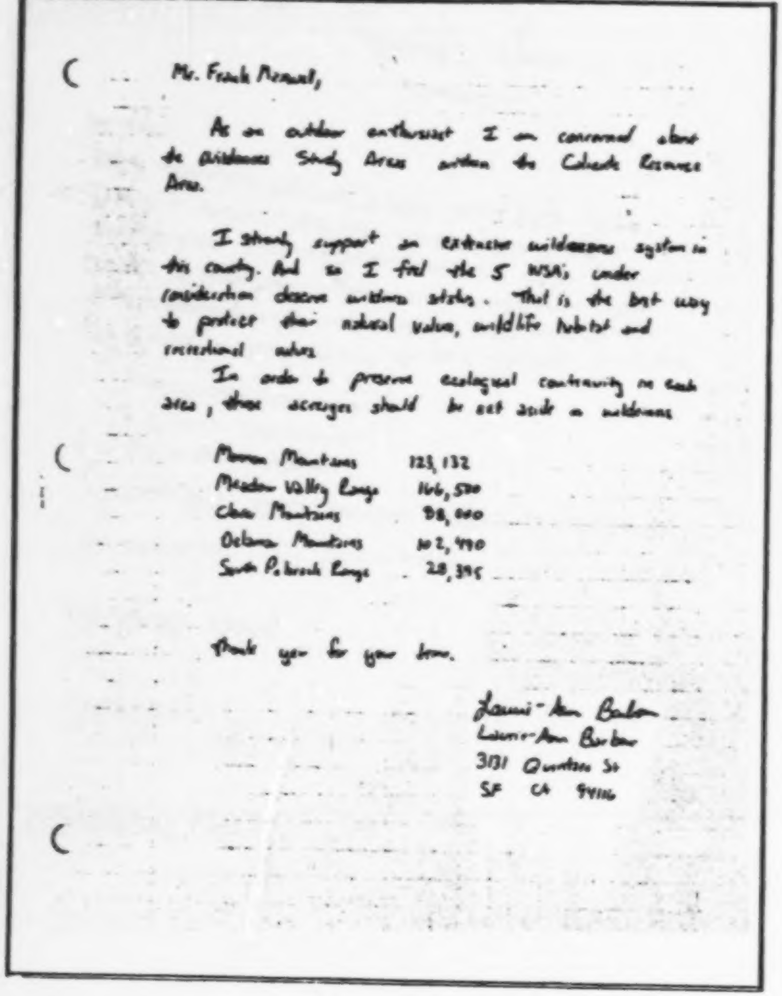
Unfortunately I do not have the time to state all my reasons but do ask that you seriously consider the recommendations of the Las Vegas Group, Toiyabe Chapter, Sierra Club concerning the below listed areas:

Mormon Mountains #0161
South Pahroc Range #0082
Clover Mountains #0129
Meadow Valley Range #0156
Delamar Mountains #0177

Thanks for your attention.

Sincerely

COMMENT LETTER 36



Mr. Frank Maxwell,

As an outdoor enthusiast I am concerned about the Wilderness Study Areas within the Caliente Resource Area.

I strongly support an extensive wilderness system in this country. And so I feel the 5 WSA's under consideration deserve wilderness status. That is the best way to protect their natural values, wildlife habitat and recreational values

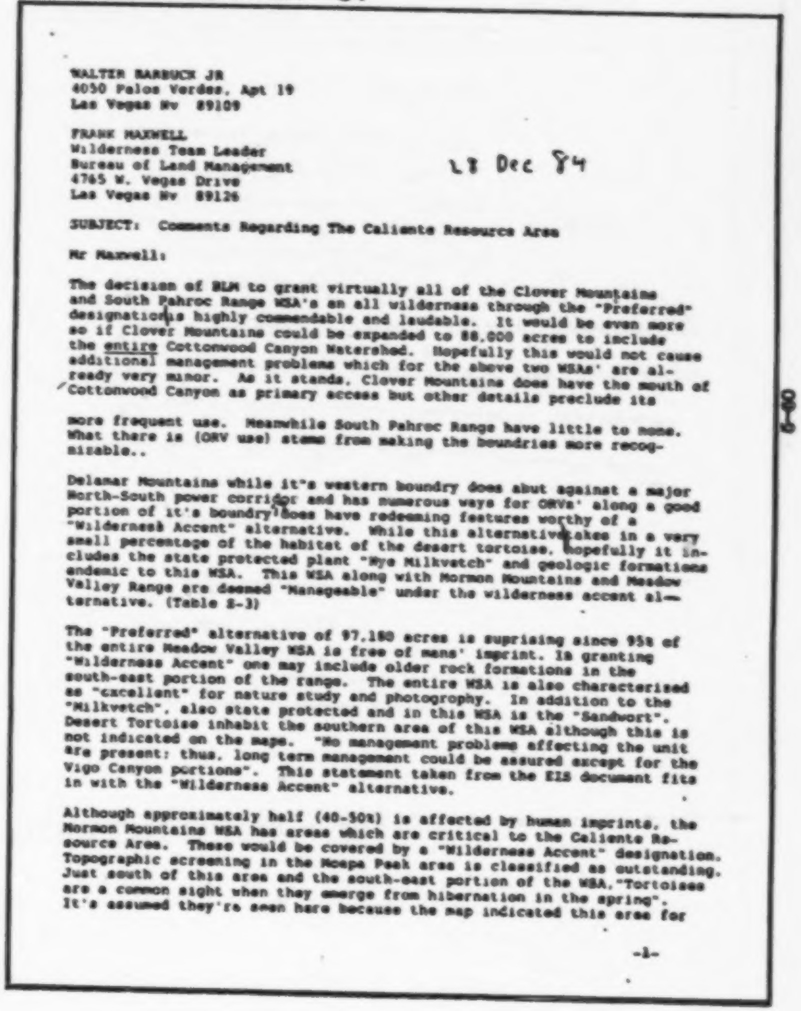
In order to preserve ecological continuity in each area, these acreages should be set aside as wilderness

Mormon Mountains	123,132
Meadow Valley Range	166,500
Clover Mountains	88,000
Delamar Mountains	102,490
South Pahroc Range	28,395

Thank you for your time.

Laurie-Ann Barber
Laurie-Ann Barber
3131 Quintara St
SF CA 94116

COMMENT LETTER 37



WALTER BARBUCK JR
4030 Palos Verdes, Apt 19
Las Vegas Nv 89109

FRANK MAXWELL
Wilderness Team Leader
Bureau of Land Management
4765 W. Vegas Drive
Las Vegas Nv 89126

28 Dec 84

SUBJECT: Comments Regarding The Caliente Resource Area

Mr Maxwell:

The decision of BLM to grant virtually all of the Clover Mountains and South Pahroc Range WSA's as all wilderness through the "Preferred" designation is highly commendable and laudable. It would be even more so if Clover Mountains could be expanded to 88,000 acres to include the entire Cottonwood Canyon Watershed. Hopefully this would not cause additional management problems which for the above two WSAs' are already very minor. As it stands, Clover Mountains does have the mouth of Cottonwood Canyon as primary access but other details preclude its more frequent use. Meanwhile South Pahroc Range have little to none. What there is (ORV use) stems from making the boundries more recognizable..

Delamar Mountains while it's western boundry does abut against a major North-South power corridor and has numerous ways for ORVs' along a good portion of it's boundry does have redeeming features worthy of a "Wilderness Accent" alternative. While this alternative takes in a very small percentage of the habitat of the desert tortoise, hopefully it includes the state protected plant "Nye Milkvetch" and geologic formations endemic to this WSA. This WSA along with Mormon Mountains and Meadow Valley Range are deemed "Manageable" under the wilderness accent alternative. (Table 2-3)

The "Preferred" alternative of 97,180 acres is supriaing since 95% of the entire Meadow Valley WSA is free of mens' imprint. Is granting "Wilderness Accent" one may include older rock formations in the south-east portion of the range. The entire WSA is also characterised as "excellent" for nature study and photography. In addition to the "Milkvetch", also state protected and in this WSA is the "Sandwort". Desert Tortoise inhabit the southern area of this WSA although this is not indicated on the maps. "No management problems affecting the unit are present: thus, long term management could be assured except for the Vigo Canyon portions". This statement taken from the EIS document fits in with the "Wilderness Accent" alternative.

Although approximately half (40-50%) is affected by human imprints, the Mormon Mountains WSA has areas which are critical to the Caliente Resource Area. These would be covered by a "Wilderness Accent" designation. Topographic screening in the Moapa Peak area is classified as outstanding. Just south of this area and the south-east portion of the WSA, "Tortoises are a common sight when they emerge from hibernation in the spring". It's assumed they're seen here because the map indicated this area for

-1-

COMMENT LETTER 37

"Tortoise Crucial". The entire WSA is "highly Sensitive" with over 300 prehistoric sites with numerous shelter caves in the entire WSA.

In making some general comments, the State division of Forestry believes that Pinyon- Juniper sites should mostly remain in multiple management. If that means that one agency should have jurisdiction within anothers' domain, I feel this to be a mistake. The introduction of elk or any other animal under uncontrolled conditions that's not historically relevent could be a tragedy. Ask the Equadorian government the status of the giant tortoises on the Galapogos Islands because of feral animals present (pigs and goats).

In closing please give this letter your close attention.-A lot could be said about scarcity of riparian areas and other zoological, botanical items etc. As of this writing, the state has one wilderness (Jarbridge) area.

Sincerely,

Walter Barbuck Jr

WALTER BARBUCK JR

COMMENT LETTER 38

P.O. Box 6234
Salt Lake City, Utah
84106

October 18, 1984

Team Leader
Caliente Wilderness DEIS
BLM
Las Vegas, Nev.

Dear Sirs:

COMMENTS ON CALIENTE WILDERNESS E.I.S. - DRAFT

Your descriptions and rational for decisions are so different between your Preferred Alternative and your Wilderness Accent Alternative that I sometimes wondered if you were referring always to the same WSA's.

If a WSA could be suitable under the Wilderness Accent alternative, I wonder why it is not being recommended for wilderness designation in your Preferred alternative. A district whim? Anti-wilderness bias?

1 Can we appreciate that natural "wild" land is a rare and rapidly diminishing commodity in the lower-48 U.S.? Thus, any land meeting "wilderness" qualifications should be valued for that reason alone, and not so recommended only when there are vital other competing resources. All five of your WSA's do not have other competing resources. So why the reluctance to recommend?

2 ORV manageability? Your discussion for each WSA under the Wilderness Accent alternative admits that "very little actual ORV activity is taking place." Are you imagining "worst scenario" ORV problems, instead, for each WSA? Have you explored signs, barriers, public education or enforcement patrolling? Let's both be realistic. Wilderness areas should not become a burden on your agency, but I think you could make some effort to establish, protect, defend and even enforce wilderness values for our future generations.

3 CLOVER MTS.- Why not enlarge this area slightly to the NW to permit better boundary definition as per your W. Accent altern.?

DELAMAR MTS.- Here you recommend zero, yet W. Accent altern. finds 102,000 acres could be suitable. "Portions of this remaining area has some outstanding wilderness values," it says (p.2-7). "About 65 to 70% of this WSA is unaffected by human imprints or outside influences," it says (p.3-21). Its lower parts contain some important desert tortoise habitat, also. If we don't "preserve" some bajada here, where will BLM do so-- no one is recommending such bajada, basins, playas or desert valley floors from any districts or agencies? Could not the wilderness and natural values here be worth some special efforts?

4 MEADOW VALLEY RANGE- Here again you have a broad sweeping central bajada that may have future ORV problems, but could you protect this one? Your W. Accent altern. says 166,000 acres could be suitable, yet you're recommending only 97,000 acres. What's really wrong here?

COMMENT LETTER 38

- 2 -

5 MORMON MTS.- Your W. Accent altern. says 123,000 acres could be suitable, yet--again--you recommend only 23,700 acres. Why, really? Are we talking about the same area? "Approximately 50 to 60% of this WSA is unaffected by manmade features," it says (p.3-26). Could an effort be made here to protect some bajada? Again, if some bajada is not protected here (for diversity values), where will BLM protect some of this landform??

The total of all WSA acreage that could be recommended by your Wilderness Accent alternative is 506,000 acres, or only 8.8% of the BLM land in your area or only 7.5% of all the total land in your area. Is that really too much? By your own EIS, you admit that there are no major competing resources in these WSA's. So what is the problem? Is there a basic perception that there is no real need to protect significant amounts of what little remains of wild and natural land in the lower-48 U.S.? (Is your head in the sand?) Have typical-Nevada anti-wilderness Sagebrush Rebels captured your office, too (they have in Utah, Oregon, Colorado, Wyoming, Idaho, Montana, Arizona and New Mexico)?

Would 10% of your area as wilderness really be too much? Would 10% of the western U.S. be too much? Would a simple 10% of the entire lower-48 U.S. as refreshing, natural, clean, healthy wilderness be too much?

With recommendations like yours, we are a very long way from ever having 10% of the lower-48 U.S. as a natural, wild, healthy and cleansing balance to the 90% of the entire lower-48 U.S. that "development" can plow, pave, dam, log, strip-mine and toxic-pollute. (May I point out that we could barely have 10% of just the West as permanently-protected natural & wild land even if all your BLM WSA's and all of the Forest Service's RARE and all the Park Service's wilderness was so designated.) Is 10% of the west really too much to ask for? Was 10% of even your rather "wild" district so hard to recommend?

May our future generations who will look back at our vanishing opportunities remember your names.

Yours disappointed,

Elliott Bernshaw

Copies to: Nevada State BLM Director Spang,
BLM Director Burford,
Interior Secretary Clark,
Congressmen M. Udall and Sieberling.

RESPONSE LETTER 38

Response to Letter 38

1. While resource conflicts are generally light with these WSAs, they are not conflict free. See, for example, the utility corridor issue relative to the Delamar Mountains WSA.

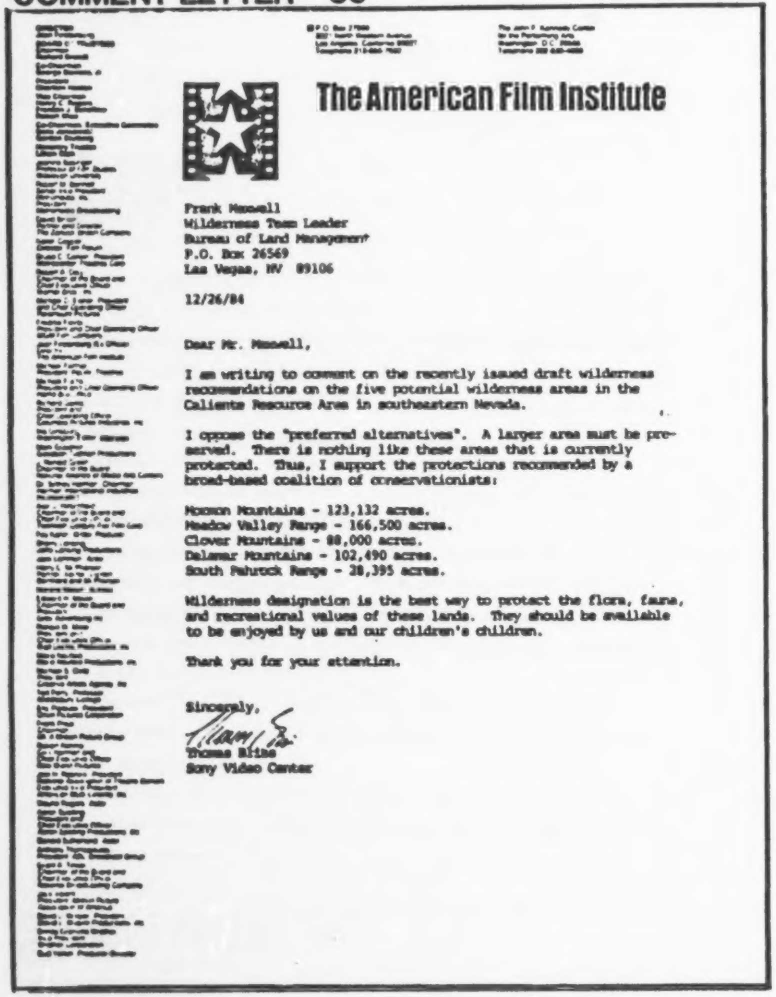
2. The EIS has been rewritten and manageability was removed as a criterion insofar as making suitability recommendations is concerned. Manageability will be considered in the Wilderness Study Report.

3. Your proposed adjustment was given consideration. We have not made the adjustment because present BLM policy discourages adding areas outside of WSAs during the final study phase. In addition, preliminary indications were that a conflict with an area of higher mineral potential may be created on the northwestern side. Congress will make the final decision to accept or modify the recommendations of the Executive Branch relative to the Clover Mountains WSA. These additions can be considered during ensuing planning cycles.

4. As stated in the analysis, the bajada in the center of the WSA will remain protected unless someone develops access to it. Terrain precludes access to it except for very limited locations where it may be possible to cross bluffs on the eastern side by going up one or two washes which have cut through the bluffs.

5. Portions of the major bajada in the Meadow VBalley range WSA are recommehded as suitable. Additionally, the new Proposed Action for the Mormon Mountains WSA recommends major areas of complete bajadas as suitable for designation.

COMMENT LETTER 39



The American Film Institute

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

12/26/84

Dear Mr. Maxwell,

I am writing to comment on the recently issued draft wilderness recommendations on the five potential wilderness areas in the Caliente Resource Area in southeastern Nevada.

I oppose the "preferred alternatives". A larger area must be preserved. There is nothing like these areas that is currently protected. Thus, I support the protections recommended by a broad-based coalition of conservationists:

Mormon Mountains - 123,132 acres.
Meadow Valley Range - 166,500 acres.
Clover Mountains - 88,000 acres.
Delamar Mountains - 102,490 acres.
South Pahroc Range - 28,395 acres.

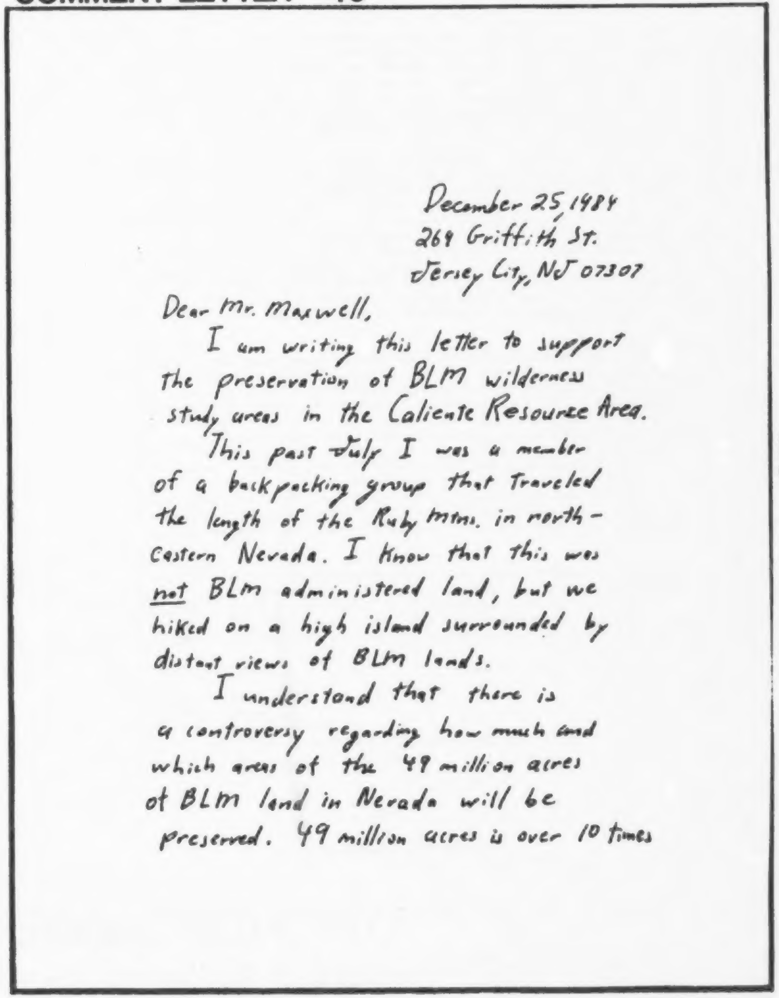
Wilderness designation is the best way to protect the flora, fauna, and recreational values of these lands. They should be available to be enjoyed by us and our children's children.

Thank you for your attention.

Sincerely,

Thomas Bliss
Sony Video Center

COMMENT LETTER 40



December 25, 1984
264 Griffith St.
Jersey City, NJ 07307

Dear Mr. Maxwell,

I am writing this letter to support the preservation of BLM wilderness study areas in the Caliente Resource Area.

This past July I was a member of a backpacking group that traveled the length of the Ruby Mtns. in north-eastern Nevada. I know that this was not BLM administered land, but we hiked on a high island surrounded by distant views of BLM lands.

I understand that there is a controversy regarding how much and which areas of the 49 million acres of BLM land in Nevada will be preserved. 49 million acres is over 10 times

COMMENT LETTER 40

the area of New Jersey! Surely more than 5 million of these acres could be considered for wilderness study.

I believe that you should make the following recommendations to Congress regarding the following wilderness study areas:

Mormon Mountains - 123,000 acres
Delamar Mountains - 102,000 acres
Meadow Valley Range - 166,000 acres
Clover Mountains - 88,000 acres
South Pahrock Range - 28,000 acres

If we make a "mistake" and "protect" too much land, the "mistake" can be corrected. But development mistakes can not be so easily corrected.

Yours Truly,
Hal Borzone

Hal Borzone
264 Griffith St.
Jersey City, N.J. 07307

COMMENT LETTER 41

December 27, 1984

Mr. Kemp Conn, District Manager
Attn.: Caliente Wolderness DEIS Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, Nevada 89126

Dear Mr. Conn:

As an interested citizen in conservation of natural resources in Nevada, I have read the completed analysis of the Sierra Club's statement of the Caliente Draft Environmental Impact Statement. I wish to address you concerning the five proposed Wilderness Areas and their impact on future generations.

It has been my pleasure to hike and backpack into most of the areas under consideration. The Mormon Mountains, with their carved slopes, are alive with flowers in the spring. The remnant ponderosa pine "grove" is spectacular against the peaks. Canyons and caverns carve the rugged terrain where desert Bighorn sheep dwell. It is a most crucial area because of its unique geologic and wildlife features. It is also crucial because of its exclusion, for the most part, in the Bureau of Land Management's proposal. If the prime peak and adjacent canyon areas are penetrated by roadways which are inviting ro Off Road Vehicular travel, (one such road already exists) then motorized access to a fragile land would be unrestricted.

The South Pahrock, Clover Mountains, including Fife Springs and adjacent canyons, Meadow Valley and Delamar Mountain Ranges all have proposed Wilderness Accent alternatives which would be acceptable to the Sierra Club, and I wish to state that I am in favor of these proposals. These areas contain special and unique geological and botanical features that qould be irreplaceable should unrestricted travel and use be allowed Wildlife would particularly suffer. As it now stands, wildlife can succeed without much intervention. Mineral resources are low in these areas. The esthetic features of these ranges far outweigh the economic value.

The concern for wilderness areas is a statement in favor of preserving outstanding areas for posterity. The contribution of natural areas can never have a price tag, for they are priceless. A part of our natural heritage, each range contains at least one unique quality that sets it apart from other wild areas that makes preservation necessary. For this reason, these "Islands in the Sky" should remain as they are.

Sincerely,
Anita C. Bowen
Anita A. Bowen, anthropologist

COMMENT LETTER 42

331- E Barker Circle
West Chester, PA 19380
January 2, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89126

Dear Mr. Maxwell:

I am writing to inform you of my concern that adequate acreages of land be set aside as wilderness in the Caliente Resource Area. Living in the East, one sees everywhere how nature is subdued by man. Wilderness, in its myriad forms, must be set aside for us and future generations of Americans. It is imperative that unique wilderness is preserved for its own intrinsic biological, archaeological, recreational, and aesthetic reasons. There is nothing like the five areas proposed for wilderness study under existing wilderness protection.

The Mormon Mountains area should include 163,132 acres which would protect the exceptional cave system, prehistoric indian sites, a grove of relic Ponderosa pine, provide crucial habitat for desert tortoise, quail, mule deer, and desert bighorn sheep, and eliminate potential management problems.

The Meadow Valley Range area should include 166,300 acres to include the bajadas which adds geographic and ecological diversity to the area. The range area is also bighorn sheep habitat.

The Clover Mountains area provides an opportunity to protect an entire desert watershed by including all of Cottonwood Canyon's watershed. This would require 89,000 acres.

The Delamar Mountains area should receive wilderness designation as well. This plateau is mule deer and bighorn sheep habitat and 102,400 acres should be set aside to protect it.

COMMENT LETTER 42

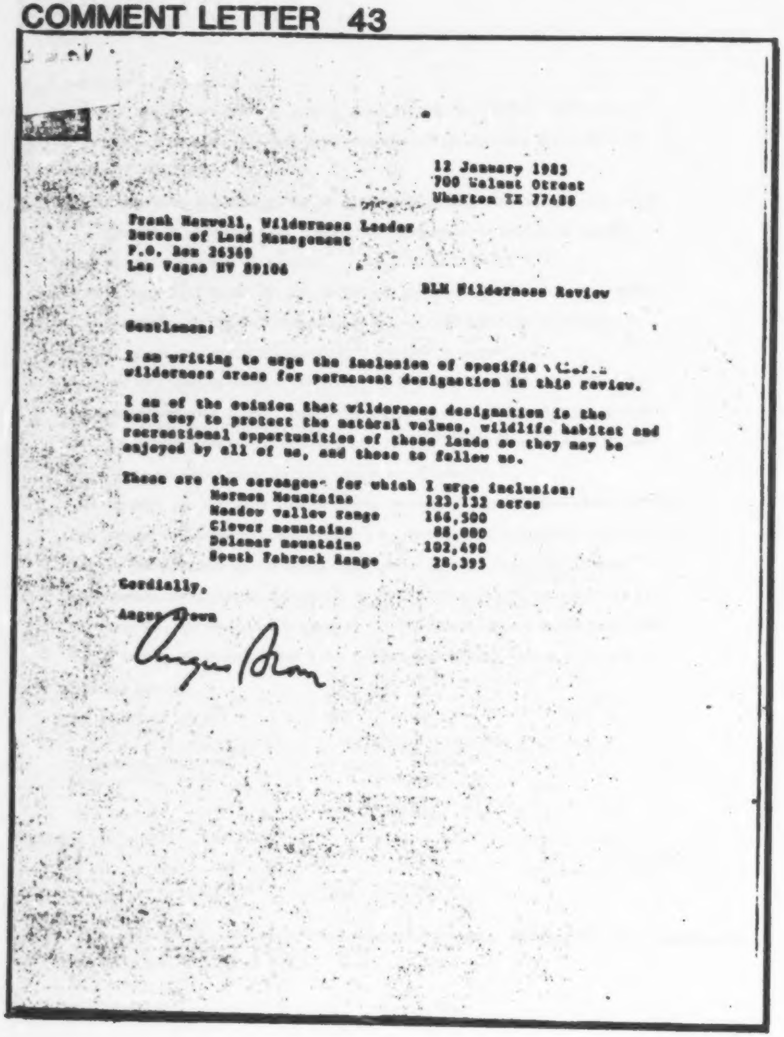
The rugged South Pahroc Range area provides uncommon solitude in a unique setting. A relic stand of dwarf white fir and unusually large pinyon pines futher add to this area's wilderness values. 23,395 acres would be required to protect this area.

Once again, I would like to emphasize that the best way to protect the unique properties of these areas is though wilderness designation.

Sincerely,

Mara A. Brier

COMMENT LETTER 43



12 January 1983
700 Walnut Street
Wharton TX 77488

Frank Maxwell, Wilderness Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas NV 89106

BLM Wilderness Review

Gentlemen:

I am writing to urge the inclusion of specific [illegible] wilderness areas for permanent designation in this review.

I am of the opinion that wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so they may be enjoyed by all of us, and those to follow us.

These are the acreages for which I urge inclusion:

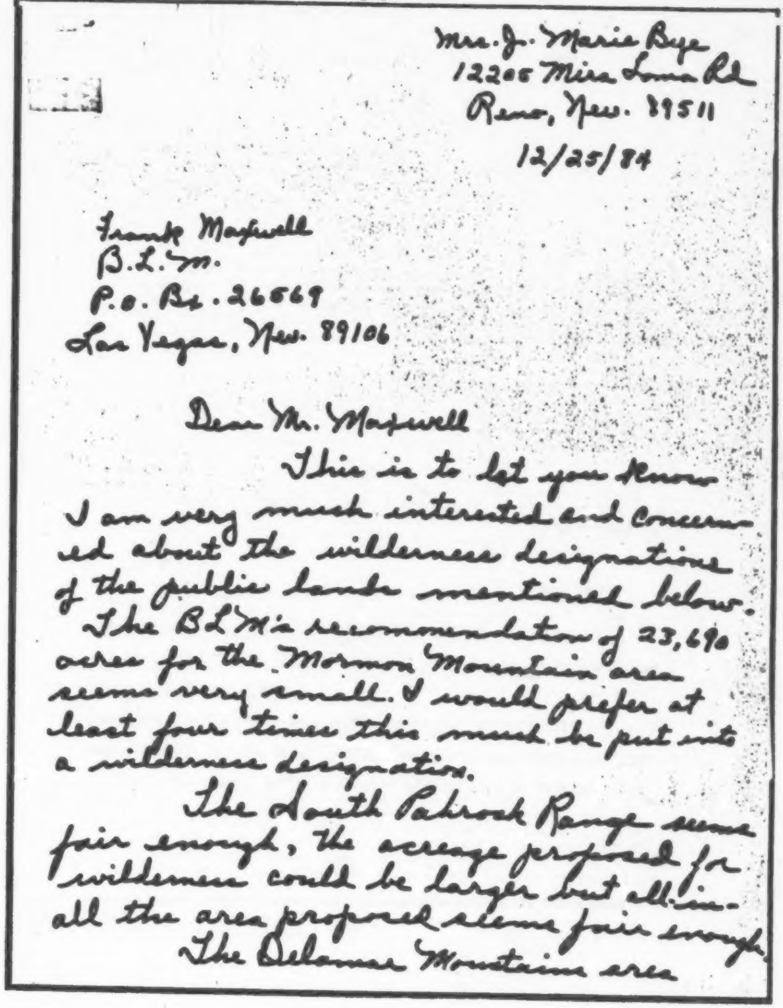
Mormon Mountains	123,132 acres
Meadow valley range	166,500
Clover mountains	88,000
Delamar mountains	102,490
South Pahrock Range	28,393

Cordially,

Angus Brown

Angus Brown

COMMENT LETTER 44



Mrs. J. Marie Bye
12205 Mira Loma Rd
Reno, Nev. 89511

12/25/84

Frank Maxwell
B.L.M.
P.O. Bx. 26569
Las Vegas, Nev. 89106

Dear Mr. Maxwell

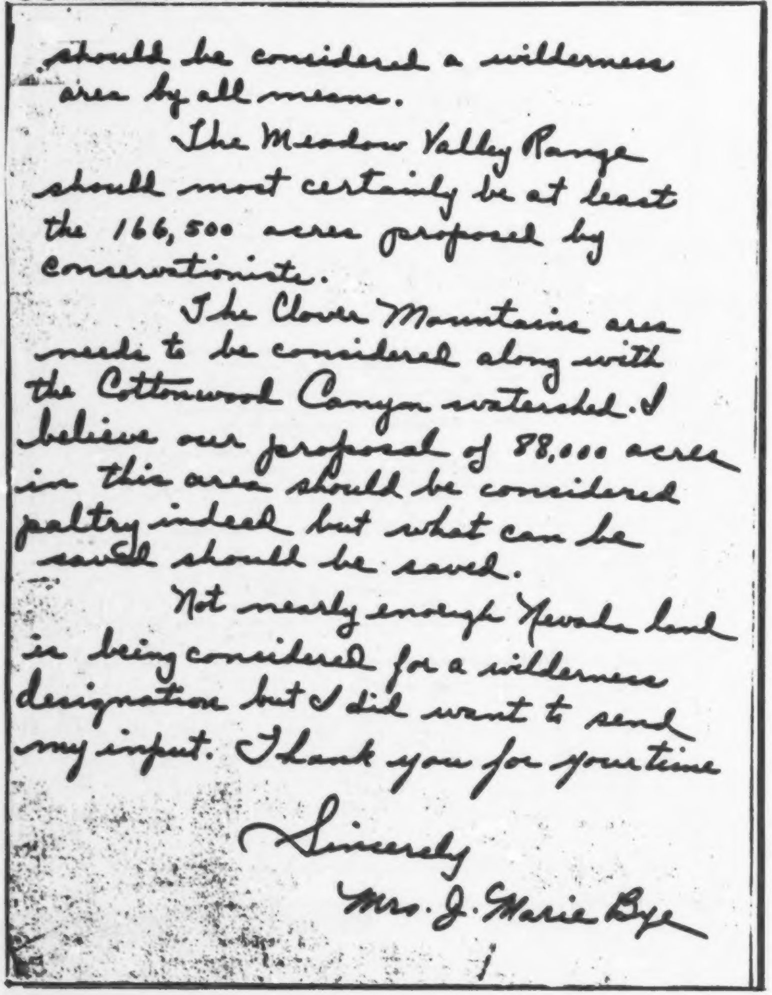
This is to let you know I am very much interested and concerned about the wilderness designations of the public lands mentioned below.

The BLM's recommendation of 23,690 acres for the Mormon Mountain area seems very small. I would prefer at least four times this much be put into a wilderness designation.

The South Pahrock Range seems fair enough, the acreage proposed for wilderness could be larger but all-in-all the area proposed seems fair enough.

The Delamar Mountains area

COMMENT LETTER 44



should be considered a wilderness area by all means.

The Meadow Valley Range should most certainly be at least the 166,500 acres proposed by conservationists.

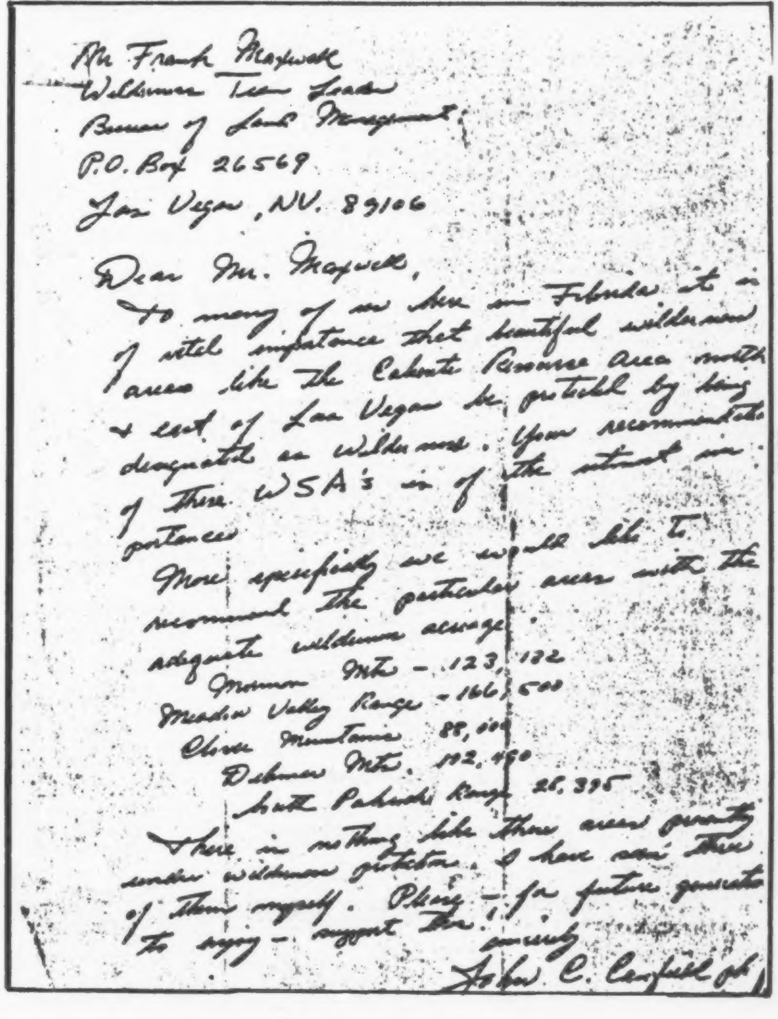
The Clover Mountains area needs to be considered along with the Cottonwood Canyon watershed. I believe our proposal of 88,000 acres in this area should be considered paltry indeed but what can be saved should be saved.

Not nearly enough Nevada land is being considered for a wilderness designation but I did want to send my input. Thank you for your time

Sincerely

Mrs. J. Marie Bye

COMMENT LETTER 45



Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV. 89106

Dear Mr. Maxwell,

To many of us here in [illegible] it is of vital importance that beautiful wilderness areas like the Caliente Resource area north & east of Las Vegas be protected by being designated as wilderness. Your recommendation of these WSA's is of the utmost importance

More specifically we would like to recommend the particular areas with the adequate wilderness acreage:

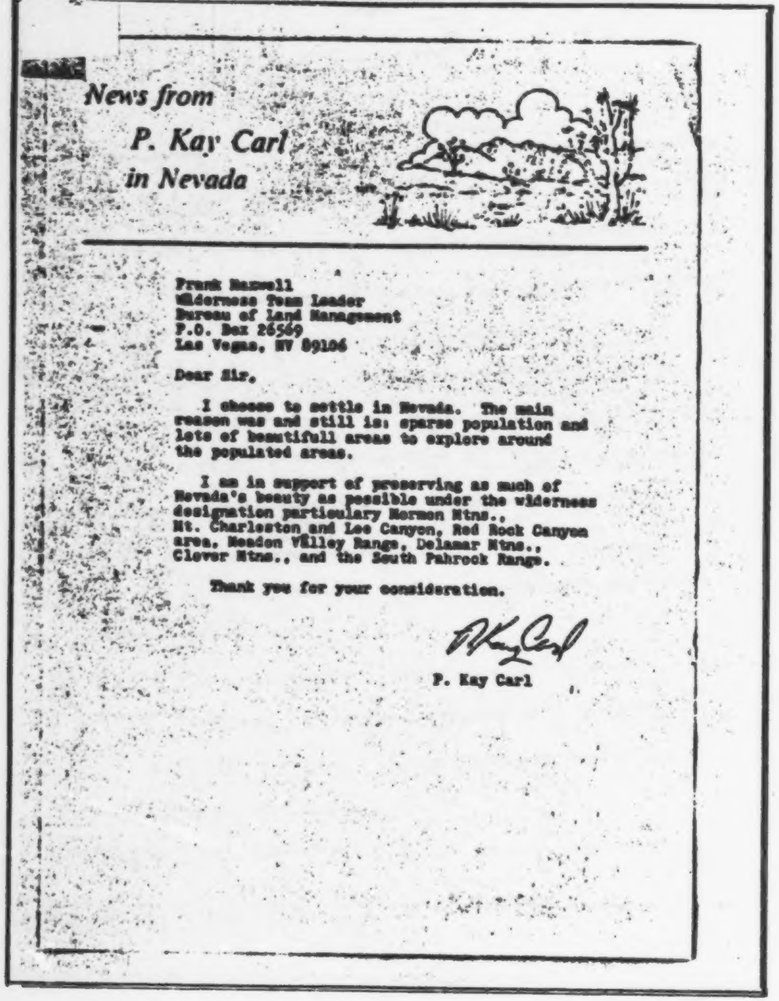
Mormon Mts. - 123,132
Meadow Valley Range - 166,500
Clover Mountains 88,000
Delamar Mts. 102,450
South Pahroc Range 26,395

There is nothing like these areas presently under wilderness protection. I have seen these myself. Please - for future generations to enjoy - support these.

Sincerely

John C. Canfield

COMMENT LETTER 46



News from
P. Kay Carl
in Nevada

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Sir,

I choose to settle in Nevada. The main reason was and still is: sparse population and lots of beautifull areas to explore around the populated areas.

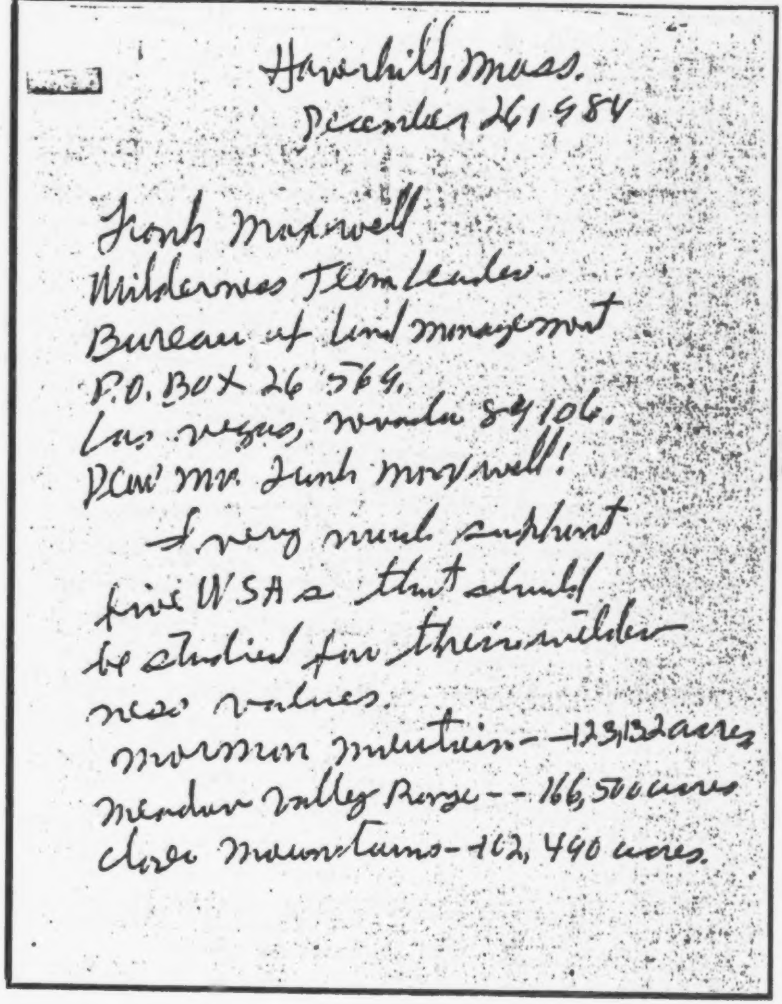
I am in support of preserving as much of Nevada's beauty as possible under the widerness designation particulary Mormon Mtns., Mt. Charleston and Lee Canyon, Red Rock Canyon area, Meadow Valley Range, Delamar Mtns., Clover Mtns., and the South Pahrock Range.

Thank you for your consideration.

P Kay Carl

P. Kay Carl

COMMENT LETTER 47



Haverhill, Mass.
December 26 1984

Frank Maxwell
Wilderness Team Leader
Bureau of land management
P.O. BOX 26 569.
Las vegas, nevada 89106.
Dear Mr. Frank Maxwell!

I very much support five WSAs that should be studied for their wilderness values.

mormon mountain--123,132 acres
meadow valley Range--166,500 acres
clover mountains-102,490 acres.

COMMENT LETTER 47

Frank Maxwell.
December, 26, 1984.
Osage Twn.

Delamar Mountains --112,480 acres
South Pahroc Range --25,395 acres.

I hereby stress that wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so that they can be enjoyed by all of us

Sincerely
John M. Glucklich
activist
Sierra Club

[illegible]

COMMENT LETTER 48

9485 Brindisi St
San Diego, CA-92107
November 26, 1984

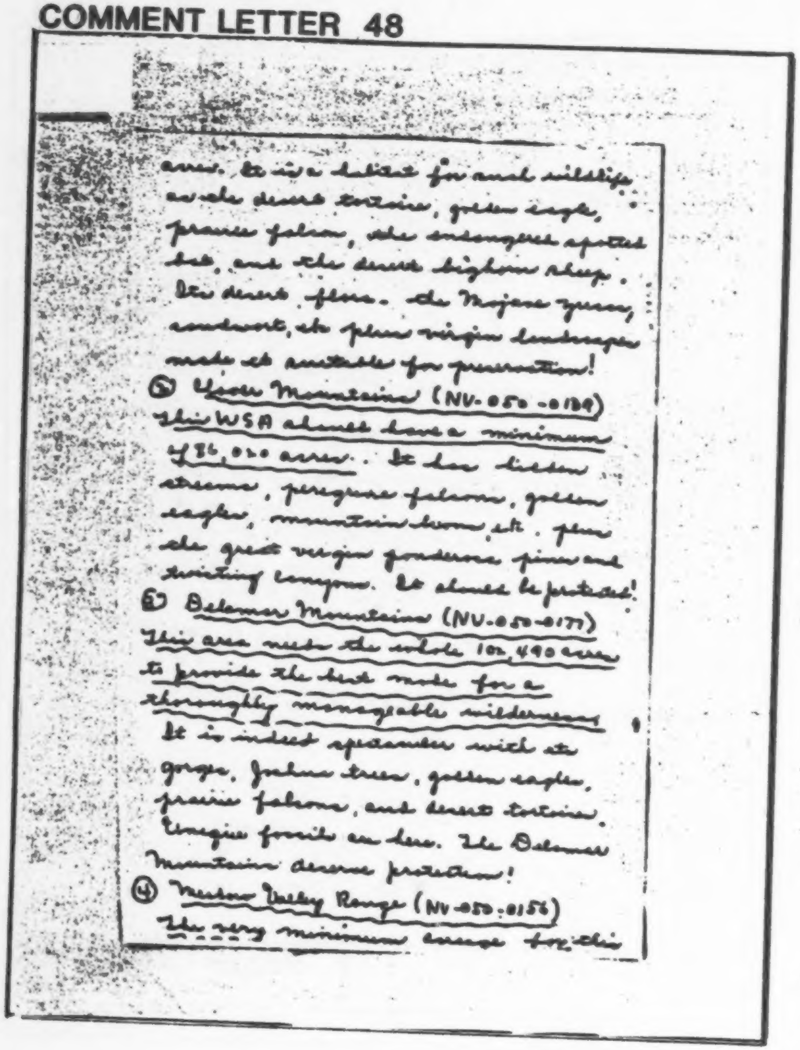
Kemp Conn, District Manager
Caliente Wilderness DEIS Team Leader
PO Box 26569 - Las Vegas, Nevada 89126

Dear Sir;

I am convinced that our land, with its forests and wildlife is the life blood of America; and America is worthy of concern and protection. Pressures to reduce acreage of certain wilderness study areas, areas of high WSA uniqueness, must be opposed. Discovery of minerals in these WSA areas are based only on finds for which there are no proven reserves, exploration studies or all mines. There should be full interim management and protection for all 557,423 acres now identified as WSA.

The five wilderness areas that concern me, with my recommendation follow—

① Mormon Range (NV-050-0161) (M)
This WSA should have a minimum of 138,180

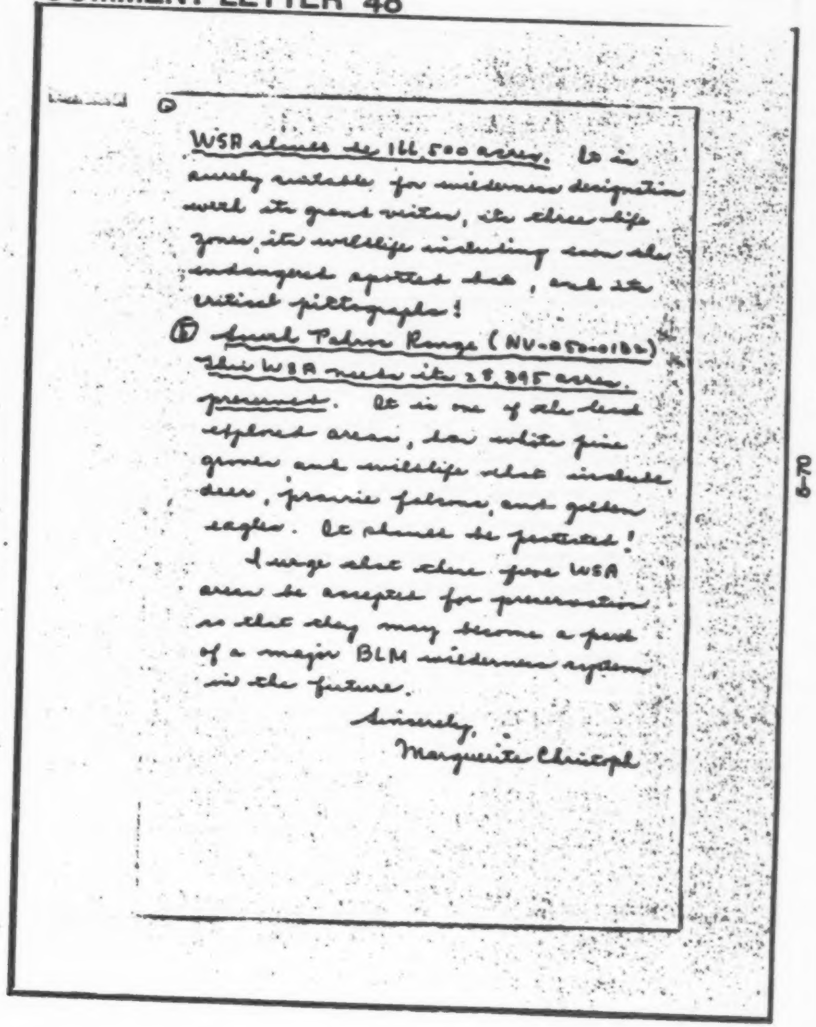


areas. It is a habitat for such wildlife as the desert tortoise, golden eagle, prairie falcon, the endangered spotted bat, and the desert bighorn sheep. Its desert flora, the Mojave yucca, [illegible], its pure virgin landscapes made it suitable for preservation!

② Clover Mountains (NV-050-0139) This WSA should have a minimum of 86,020 acres. It has hidden streams, peregrine falcons, golden eagles, mountain lions, etc. plus the great virgin ponderosa pines and twisting canyons. It should be protected!

③ Delamar Mountains (NV-050-0177) This area needs the whole 102,490 acres to provide the best mode for a thoroughly manageable wilderness. It is indeed spectacular with its gorges, Joshua trees, golden eagles, prairie falcons, and desert tortoise. Unique fossils are here. The Delamar Mountains deserve protection!

④ Meadow Valley Range (NV-050-0156) The very minimum acreage for this



WSA should be 166,500 acres. It is surely suitable for wilderness designation with its grand vistas, its three life zones, its wildlife including even the endangered spotted bat, and its critical pictographs!

⑤ [illegible] Range (NV-050-0132) This WSA needs its 28,395 acres preserved. It is one of the least explored areas, has white fir groves and wildlife that include deer, prairie falcons, and golden eagles. It should be protected!

I urge that these five WSA areas be accepted for preservation so that they may become a part of a major BLM wilderness system in the future.

Sincerely,

Marguerite Christoph

CHERI CIMBORER
816 LILLIS
N. LAS VEGAS, NV. 89030
702-642-7238

January 3, 1985

Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, NV 89126

Dear Mr. Conn:

I hope it's not too late to write. It was hard enough to get letters out with all my Christmas cards. It's taken me until today to get around to sending a letter regarding wilderness.

I am, of course, writing to express an opinion regarding the wilderness recommendations for the Caliente Resource Area. Lincoln County certainly contains a lot of prime wilderness areas, and I am afraid that the BLM has not recommended enough of them for such designation.

First, let me congratulate you on the innovative method you used to consider impacts on minerals and energy commodities. I have urged you in the past to consider the importance and availability in other areas of minerals, rather than simply their presence in a proposed wilderness area. This approach is fair to the miners, as well as giving a much more accurate picture of the potential conflicts with wilderness values. Furthermore, it would be grossly unfair to exclude an area based on speculative mineral values. Since the U.S. Geological Survey will do a comprehensive study of mineral potential only on areas proposed as wilderness, it would be better to "err" on the side of wilderness at this time so that mineral potential could be fairly determined.

Over the past few years, there has been an increasing awareness of the value of wilderness. More and more people are coming to appreciate and enjoy wilderness areas. As the population of Las Vegas grows, there will be an ever-increasing demand for quality wilderness experience, as a counterpoise to the growing urbanization of the city. Lincoln County is near enough to realistically offer such recreational opportunities.

Last Spring I took a hike in the South Pahrock Range. I was extremely impressed with this unique area. We saw two deer, as well as much native vegetation that had not been harmed by overgrazing (as is the case in much of Nevada). The maze of rocks, as well as the expansive trees, presented a great contrast to my usual hiking areas in Clark County. I heartily endorse your Preferred Alternative (28,195 acres) for this area. As you recognize, there are no significant mineral conflicts and few manageability problems in this WSA.

A month or so ago I was lucky enough to visit the Meadow Valley Range. It was a delightful weekend and gave me a real appreciation for the wilderness values of the Range. Your Preferred Alternative designates only the long, narrow ridge as wilderness, although the DEIS admits there are few resource conflicts that would result with addition of the broad bajada. Generally bajadas have manageability problems that have "forced" you to omit them in the past; this is, therefore, a rare opportunity to include a unique land form in wilderness. The opportunity for solitude is enhanced by the restricted access due to the steep eastern embankment. Choosing the Wilderness Accent Alternative (166,500 acres) for this area would more than double the width of this wilderness area, thus producing a far more favorable configuration.

I have not yet had the opportunity to visit the Delamar Mountains, but I have heard stories and seen photographs of this unique area. Here again, your main criterion for exclusion from wilderness status is that there would be little vegetative or topographic screening on the plateau--thus, little chance for solitude. And I reiterate my continued argument: that much of the feeling of solitude one receives in the desert is due to the ability to see vast distances and know that there are no other people around. Due to the large size of the Delamars and the difficulty of access, it is very likely that visitation will be low and solitude plentiful. The Wilderness Accent Alternative (102,490 acres) would resolve manageability problems and prevent conflicts with the existing road and pipeline. This area presents few mineral conflicts and offers excellent habitat for deer, bighorn sheep, desert tortoises, and many raptors.

Your Preferred Alternative on the Clover Mountains recognizes the extraordinary wilderness qualities of this area. The stream basin of Cottonwood Creek makes this area quite unique in proposed wilderness areas in Southern Nevada. Although your Preferred Alternative protects most of the WSA, I feel a better proposal is an enlargement of the Wilderness Accent Alternative boundaries near Fife Spring in the north, with a proposed wilderness of 89,000 acres. This would improve manageability by moving the boundary to a ridge at the edge of the drainage basin. It would also totally protect the entire Cottonwood Canyon drainage basin. For both scientific study and for aesthetics, it would be definitely beneficial to have an entire watershed in a designated wilderness area.

I have saved your most dismaying decision until last--the Mormon Mountains. I have made a number of trips into this beautiful and impressive area. Moapa Peak dominates the view for miles around. The DEIS states that the devices intended to improve the habitat for bighorn and thus increase their number could be carried out in wilderness only at increased cost and difficulty. Yet, the earlier Environmental Analysis stated there would be no significant conflict between the proposed projects and wilderness. Furthermore, it is important to realize that without wilderness protection, bighorn preservation is threatened. The same roads or ways that would service the watering devices would also allow access to hunters, ORVers, and others who would have a negative impact on the wildlife. The DEIS furthermore recognizes that there are numerous Indian sites in this area. Again, without wilderness designation, it is likely that this cultural resource will be severely negatively impacted by increased visitation. The over 2000 known archeological sites warrant both wilderness and ACEC status. With its beauty, sentinel peak, superb wildlife habitat, remnant ponderosa pines, limestone caves, prehistoric sites, etc., this is an area truly deserving wilderness protection--and definitely given short shrift in your Preferred Alternative. I strongly urge you to reconsider and make the Wilderness Accent Alternative (123,132 acres) be the Preferred Alternative.

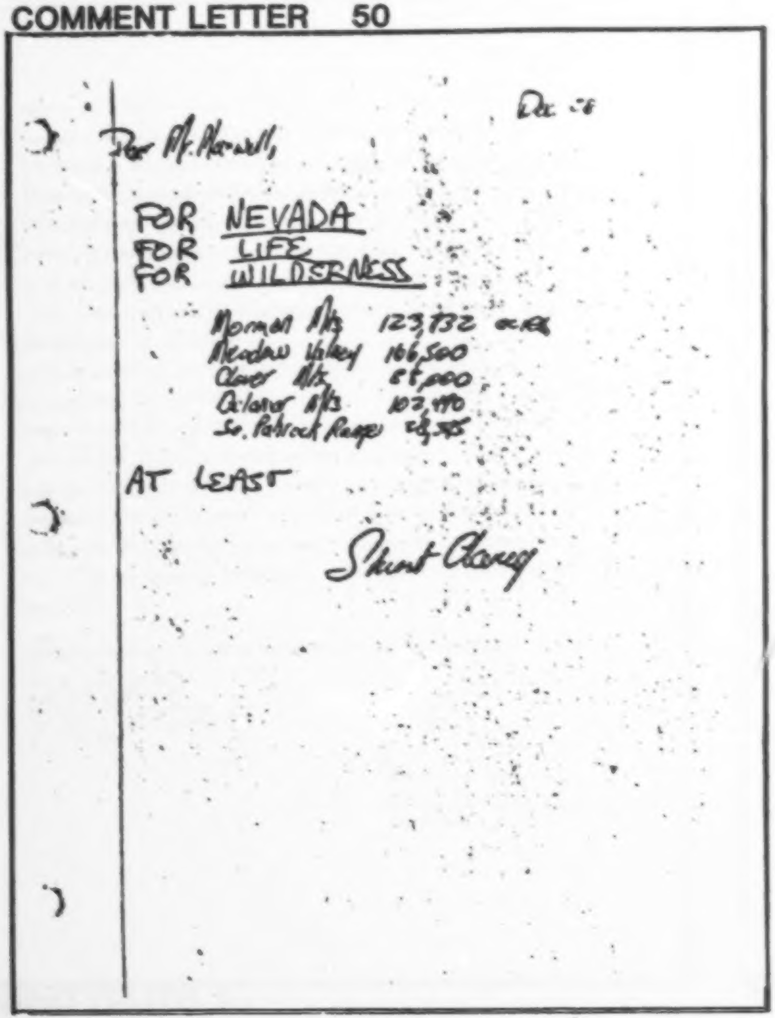
In closing, I would like to express one feeling I've gotten during this wilderness evaluation process: an uneasy feeling that the BLM is prejudiced against wilderness protection in this area. At first glance, things seemed pretty good--two entire areas almost wholly designated as wilderness. But when you looked specifically, these two areas--and the other areas designated for wilderness--formed only a small percentage of the entire area studied. These areas have outstanding wilderness characteristics and, amazingly, extremely few resource conflicts that would argue against wilderness designation. Please review your recommendations in the light of the above comments, and I hope to see a quite different view in the Final EIS.

Sincerely,

Cheri Cinkoske

Cheri Cinkoske

COMMENT LETTER 50



Dec '8

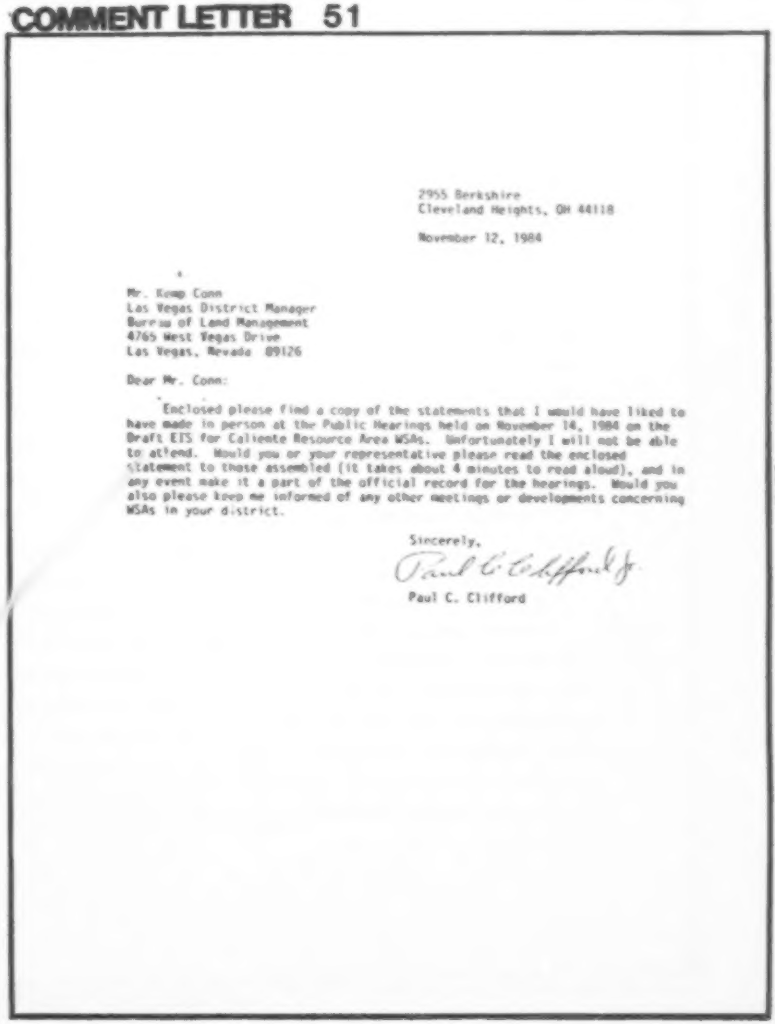
Dear Mr. Maxwell,

FOR NEVADA
FOR LIFE
FOR WILDERNESS

Mormon Mts 123,732 acres
Meadow Valley 106,500
Clover Mts 85,000
Delamar Mts 103,190
So. Pahroc Range 28,595

AT LEAST

COMMENT LETTER 51



2955 Berkshire
Cleveland Heights, OH 44118

November 12, 1984

Mr. Kemp Conn
Las Vegas District Manager
Bureau of Land Management
4765 West Vegas Drive
Las Vegas, Nevada 89126

Dear Mr. Conn:

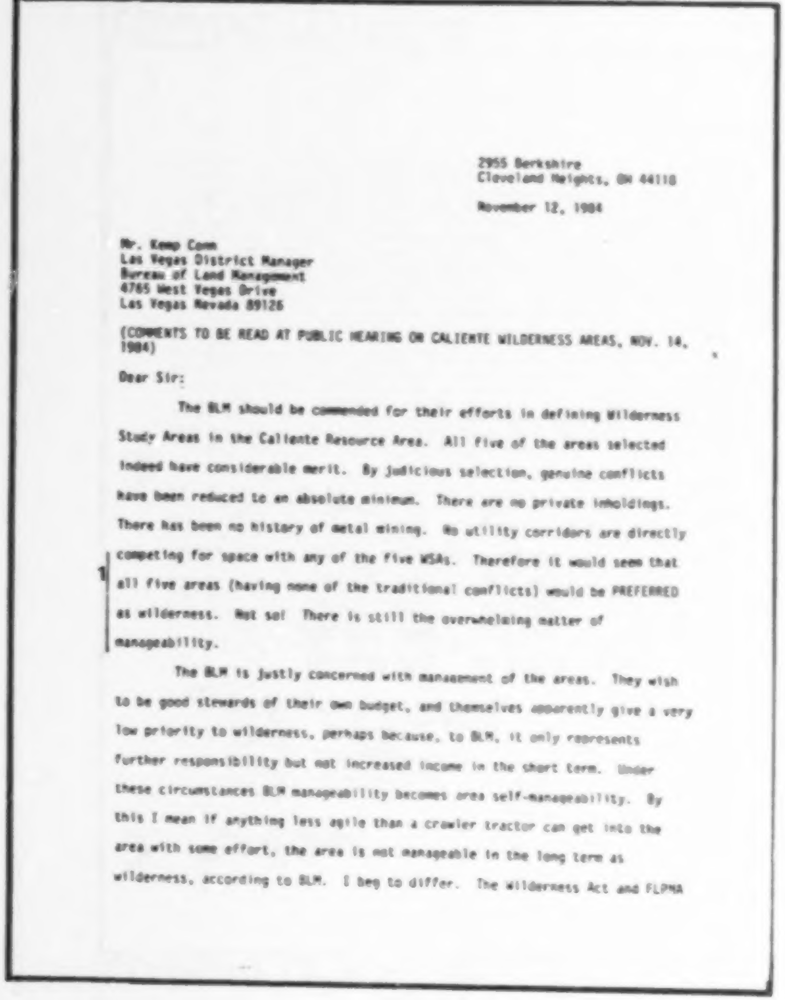
Enclosed please find a copy of the statements that I would have liked to have made in person at the Public Hearings held on November 14, 1984 on the Draft EIS for Caliente Resource Area WSAs. Unfortunately I will not be able to attend. Would you or your representative please read the enclosed statement to those assembled (it takes about 4 minutes to read aloud), and in any event make it a part of the official record for the hearings. Would you also please keep me informed of any other meetings or developments concerning WSAs in your district.

Sincerely,

Paul C. Clifford Jr.

Paul C. Clifford

COMMENT LETTER 51



2955 Berkshire
Cleveland Heights, OH 44118

November 12, 1984

Mr. Kemp Conn
Las Vegas District Manager
Bureau of Land Management
4765 West Vegas Drive
Las Vegas Nevada 89126

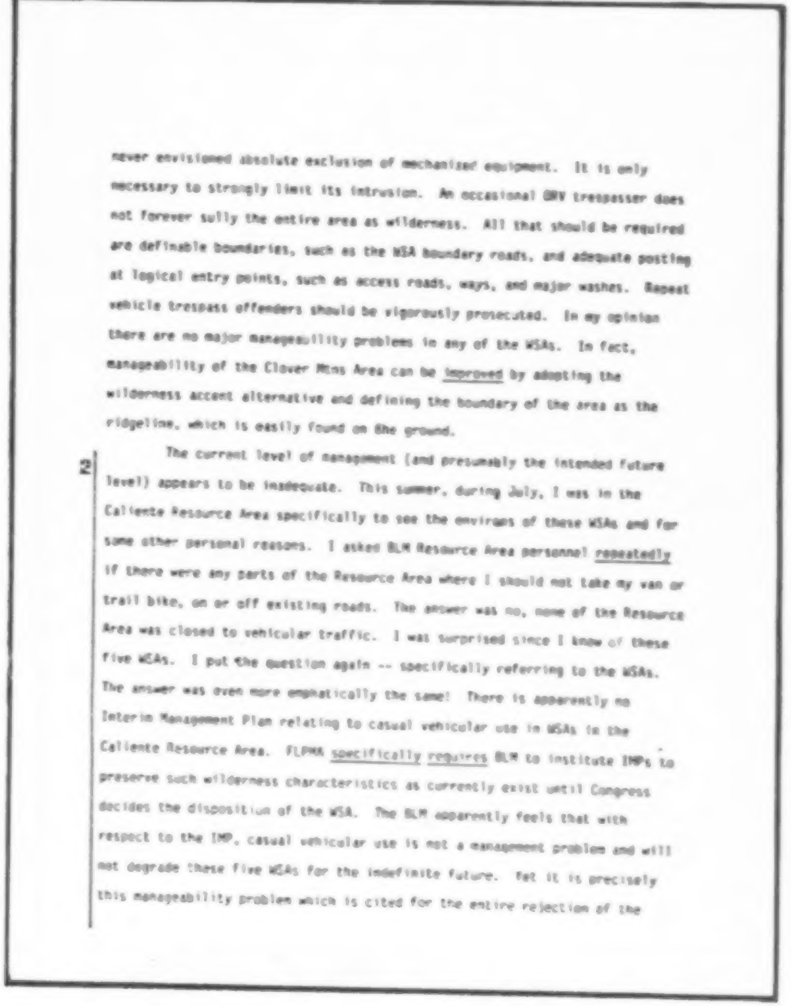
(COMMENTS TO BE READ AT PUBLIC HEARING ON CALIENTE WILDERNESS AREAS, NOV. 14, 1984)

Dear Sir:

The BLM should be commended for their efforts in defining Wilderness Study Areas in the Caliente Resource Area. All five of the areas selected indeed have considerable merit. By judicious selection, genuine conflicts have been reduced to an absolute minimum. There are no private inholdings. There has been no history of metal mining. No utility corridors are directly 1 competing for space with any of the five WSAs. Therefore it would seem that all five areas (having none of the traditional conflicts) would be PREFERRED as wilderness. Not so! There is still the overwhelming matter of manageability.

The BLM is justly concerned with management of the areas. They wish to be good stewards of their own budget, and themselves apparently give a very low priority to wilderness, perhaps because, to BLM, it only represents further responsibility but not increased income in the short term. Under these circumstances BLM manageability becomes area self-manageability. By this I mean if anything less agile than a crawler tractor can get into the area with some effort, the area is not manageable in the long term as wilderness, according to BLM. I beg to differ. The Wilderness Act and FLPMA

COMMENT LETTER 51



never envisioned absolute exclusion of mechanized equipment. It is only necessary to strongly limit its intrusion. An occasional ORV trespasser does not forever sully the entire area as wilderness. All that should be required are definable boundaries, such as the WSA boundary roads, and adequate posting at logical entry points, such as access roads, ways, and major washes. Repeat vehicle trespass offenders should be vigorously prosecuted. In my opinion there are no major manageability problems in any of the WSAs. In fact, manageability of the Clover Mtns Area can be improved by adopting the wilderness accent alternative and defining the boundary of the area as the ridgeline, which is easily found on the ground.

2 The current level of management (and presumably the intended future level) appears to be inadequate. This summer, during July, I was in the Caliente Resource Area specifically to see the environs of these WSAs and for some other personal reasons. I asked BLM Resource Area personnel repeatedly if there were any parts of the Resource Area where I should not take my van or trail bike, on or off existing roads. The answer was no, none of the Resource Area was closed to vehicular traffic. I was surprised since I know of these five WSAs. I put the question again -- specifically referring to the WSAs. The answer was even more emphatically the same! There is apparently no Interim Management Plan relating to casual vehicular use in WSAs in the Caliente Resource Area. FLPMA specifically requires BLM to institute IMPs to preserve such wilderness characteristics as currently exist until Congress decides the disposition of the WSA. The BLM apparently feels that with respect to the IMP, casual vehicular use is not a management problem and will not degrade these five WSAs for the indefinite future. Yet it is precisely this manageability problem which is cited for the entire rejection of the

COMMENT LETTER 51

Delamar Mtns WSA and severe reductions in the Meadow Valley Range and Mormon Mtns areas. It cannot cut both ways! Either it is important and the current IMP should reflect this, or it is not important and the BLM should drop its manageability complaints agianst these three areas.

My recommendation at this hearing is that the entirety of all five areas: South Pahroc, Clover Mtns, Meadow Valley Range, Mormon Mtns, and Delamar Mtns, be recommended as suitable for Wilderness status including the additional acreage proposed in the Clover Mtns Wilderness Accent Alternative.

Thank you.

Sincerely yours,

Paul C. Clifford

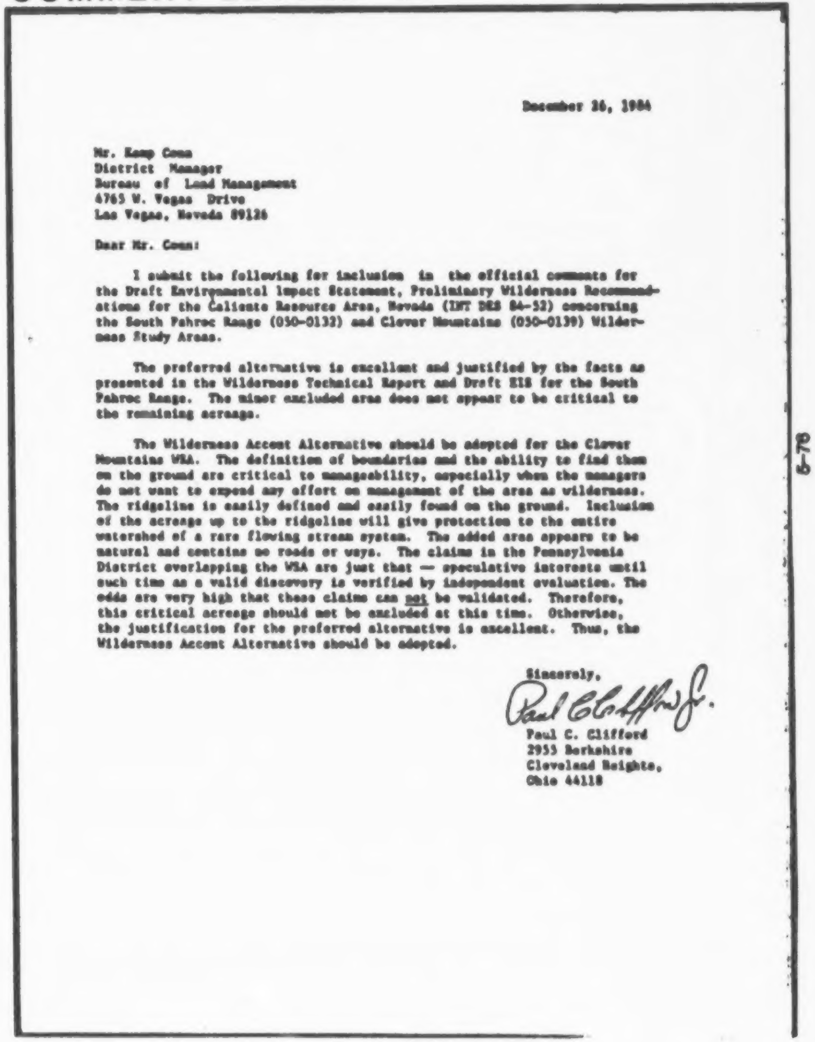
RESPONSE LETTER 51

Response to Letter 51

1. Manageability as a discriminator, has been removed from discussion in the EIS because it is not an environmental issue. Manageability will be considered in the Wilderness Study Report.

2. Current BLM policy regarding ORV use states " they may only be used on existing ways and trails and within 'open' areas that were designated prior to the passage of FLPMA (October 21, 1976)...Until WSAs are designated as wilderness or released from study status, ORV use within each WSA is governed by the terms and conditions as spelled out...in the land use planning decisions...". The Caliente Resource Area is currently monitoring the five WSAs for ORV use for compliance with this policy and has taken corrective actions as necessary.

COMMENT LETTER 52



December 26, 1984

Mr. Kemp Conn
District Manager
Bureau of Land Management
4765 W. Vegas Drive
Las Vegas, Nevada 89126

Dear Mr. Conn:

I submit the following for inclusion in the official comments for the Draft Environmental Impact Statement, Preliminary Wilderness Recommendations for the Caliente Resource Area, Nevada (INT DES 84-32) concerning the South Pahroc Range (050-0132) and Clover Mountains (050-0139) Wilderness Study Areas.

The preferred alternative is excellent and justified by the facts as presented in the Wilderness Technical Report and Draft EIS for the South Pahroc Range. The minor excluded area does not appear to be critical to the remaining acreage.

The Wilderness Accent Alternative should be adopted for the Clover Mountains WSA. The definition of boundaries and the ability to find them on the ground are critical to manageability, especially when the managers do not want to expend any effort on management of the area as wilderness. The ridgeline is easily defined and easily found on the ground. Inclusion of the acreage up to the ridgeline will give protection to the entire watershed of a rare flowing stream system. The added area appears to be natural and contains no roads or ways. The claims in the Pennsylvania District overlapping the WSA are just that — speculative interests until such time as a valid discovery is verified by independent evaluation. The odds are very high that these claims can not be validated. Therefore, this critical acreage should not be excluded at this time. Otherwise, the justification for the preferred alternative is excellent. Thus, the Wilderness Accent Alternative should be adopted.

Sincerely,

Paul C Clifford Jr.

Paul C. Clifford
2953 Berkshire
Cleveland Heights,
Ohio 44118

December 30, 1984

Mr. [illegible] Conn
Las Vegas District Manager
Bureau of Land Management
[illegible] West Vegas Drive
Las Vegas, Nevada 89126

Dear Mr. Conn:

I submit the following for inclusion in the official comments on the Caliente Draft Wilderness Environmental Impact Statement (INT DES 84-52) concerning the Meadow Valley Range (NV-050-0156) and Mormon Mountains (NV-050-0161).

The Preferred alternatives in these areas, while certainly better than nothing, are inadequate. The two WSAs in their entirety really create one coherent area which happens to have a railroad going up a valley through the middle of the combined area. The existing WSA boundaries are well defined and easily found on the ground. (~~See the accompanying map.~~)

The following points must be considered in the final recommendation:

I. MEADOW VALLEY RANGE WSA

1 Under alternatives, page 3 (DEIS 2-3), the Preferred alternative excludes significant areas of the Meadow Valley WSA because of ORV manageability problems and mineral claims. Four areas within the WSA have been alleged to have management problems, namely, Bunker Hills, Central Bajada, Vigo Canyon, and Hackberry Canyon.

A. Bunker Hills
BLM ALLEGATION 1: There is a cherrystem road to a Texaco deep test drill site (Wilderness Technical Report (WTR), page 23), which may indicate mineral values.

RESPONSE: While the results of the deep test are not officially released, Texaco has not claimed that there are economic reserves known or implied as a result of that test. It is quite safe to assume, under the circumstances, that the test was negative. The DEIS, pages 4-25, concludes correctly that there is no significant energy-mineral impact in this WSA.

BLM ALLEGATION 2: The statement is made that there are "several ways", as a result of the drill site, which forbode a future management problem (DEIS 2-3).

RESPONSE: However, the WTR, page 20, states: "The cherrystem road and associated ways into the drill site affect only the area adjacent to it

---

2

because of topographic screening." And further: "The influence of ... the interior drill site are not of a sufficient size or nature to cause substantial damage and do not have a lasting effect on the remaining portion." (WTR, p. 20) Again (WTR, p. 19): "In the Bunker Hills area there are also occasional vehicle tracks but no established ways through the area." As noted in the WTR, p. 19: "The Bunker Hills are low angular hills ... consisting of fault blocks characterized by rugged erosion features." The section on Impacts (DEIS, p. 4-30) refers to the "moderate to outstanding wilderness values of the Bunker Hills."

BLM ALLEGATION 3: There are 1100 acres of claims (nature unspecified) in the very extreme southern toe of the WSA, whose development would have a negative impact on the rest of the WSA. (WTR, p. 23)

2 RESPONSE: As seen on the map (DEIS, end of Chapter 3), these acres are not strategically located for the WSA. Furthermore, they are given a relative potential of "4", which means that there is almost nothing known about them. None of the individual claims is germane until it is shown to have a valid discovery associated with it. Given that there has been no significant mineral or metal mining in the area, this is very unlikely. The claims should not be used to remove acreage from the WSA at this time.

3 QUESTION: In light of the BLM's own statements given above, why is the Bunker Hills area excluded from the Preferred alternative for the Meadow Valley Range WSA?

B. The Central Bajada
BLM ALLEGATION 1: No specific reason is given in the Preferred alternative for excluding this major portion consisting of about 74,000 acres of (at least) moderate wilderness value (DEIS, p. 4-15 and elsewhere). Presumably it is deleted because of fear of future ORV intrusion. For instance, the WTR, p. 22, states: "The terrain of the entire Bajada region makes most of the area accessible to vehicles. Controlling this area, once access to the region is gained, would be very difficult."

RESPONSE: Nevertheless, the WTR notes immediately: "However, access to the region from Meadow Valley Wash is fairly restrictive except for Vigo Canyon and the associated drainage area." Indeed, "The edge of the WSA along Meadow Valley Wash is bluffy and not easily crossed." (DEIS, p. 3-24) In fact, the DEIS, p. 4-24, states: "Without access being constructed, the large Central Bajada would not receive ORV pressure and would be readily manageable as wilderness." Again the DEIS, p. 2-7, states: "ORV manageability may be a problem on the Central Bajada in the future if access is developed" (emphasis added). The solution here is very simple -- do not develop the access. The area is sufficiently inhospitable to vehicles that "except for an occasional exploration trail or casual use, this area will remain undisturbed and thus its wilderness value will remain intact." (DEIS, p. 4-15) Then what is the rationale for removing this area from

4 the WSA? The statement that there is a "benefit" to keeping the Bajada open for CRV use is hogwash -- it is not now and never has been used for CRVs, so its closure does not represent a negative impact.

5 QUESTION: In light of the BLM's own statement given above, why is the Central Bajada area excluded from the Preferred alternative for the Meadow Valley Range WSA?

C. Vigo Wash drainage
BLM ALLEGATION 1: This portion consisting of about 20,000 acres is determined to be unsuitable because "numerous CRV trails crisscross this area, having gained access through Vigo Canyon." (DEIS, p. 4-15) Wilderness values are alleged to be low.

RESPONSE: "Manageability seems to be an immediate problem only where two large washes at Hackberry Canyon and Vigo Wash permit access up the washes themselves but not out of the wash." (DEIS, p. 2-7) Since Wildcat Wash and Farrier Wash have had organised ORV events held in them without degrading the wilderness values (WTR, p. 19), it is hard to see how casual use could so degrade the Vigo Wash. "The washes along the southern boundary do show signs of seasonal vehicular use when fall and winter rains have not washed the tracks away." (WTR, p. 19-20) It is hard to believe that it does not also rain in the Vigo Wash drainage! As most of the ways are confined to the washes (see DEIS, p. 2-7, above), damage should be ephemeral. It may also be possible to block vehicular access at Vigo Canyon with the proper placement of large boulders.

6 QUESTION: Is it truly impossible to reasonably control access to the Vigo Wash drainage in Vigo Canyon? In light of the BLM's own statement given above, why is the Vigo Wash area excluded from the Preferred alternative for the Meadow Valley Range WSA?

D. Hackberry Canyon
BLM ALLEGATION 1: Lower Hackberry Canyon was omitted because of ORV use, hunters driving to Hackberry Spring, and a cattle handling facility there. (DEIS, p. 2-3)

RESPONSE: "Manageability seems to be an immediate problem only where two large washes at Hackberry Canyon and Vigo Wash permit access up the washes themselves but not out of the wash. (DEIS, p. 2-7, emphasis added) The wash is therefore a way as far as the cattle corral at Hackberry Spring. Since egress from the wash is limited, cherrystem the wash as far as the spring and leave the rest of the area intact.

QUESTION: In light of the BLM's own statement above and the utter simplicity of the solution, why is the whole area associated with the lower Hackberry Canyon excluded from the Preferred alternative for the Meadow Valley Range WSA?

COMMENT: In light of all the foregoing, it would seem that the minimum area to be recommended as suitable would be that proposed in the Wilderness Accent alternative and possibly the entire area, as in the All Wilderness alternative. There are no significant negative impacts of any kind in BLM's own analysis. The All Wilderness alternative makes

the bald statement that "the wilderness integrity of the WSA can be retained with minimal management" (DEIS, p. 4-24), although there follows a caveat about the Vigo Wash area. Again the now familiar passage from DEIS, p. 2-7: "Manageability seems to be an immediate problem only where two large washes at Hackberry Canyon and Vigo Wash permit access up the washes themselves but not out of the wash." As to addressing future problems, the "final" Wilderness Management Policy (WMP) is to be updated on a regular basis or as conditions charge (BLM WMP, p. 30, Chapter 4, Paragraph 4).

Since current problems are addressed, and BLM has the wherewithall to amend procedures to meet future problems, the BLM should recommend at least the acreage contained in the Wilderness Accent alternative for the Meadow Valley Range WSA as suitable for inclusion in the Wilderness Preservation System.

7 QUESTION: Why are organized (sanctioned?) CRV competitions being held in a WSA where CRV use is admitted to be degrading wilderness values?

8 QUESTION: If CRV use is degrading or potentially degrading the Bunker Hills area, the Central Bajada, and the Vigo Wash areas, why does the IMP for this WSA not restrict CRV use as mandated by law (FLPMA, Section 603, Paragraph c)?

9 QUESTION: Does a formal Interim Management Plan exist for the Meadow Valley Range WSA? If so, please send me a copy.

II. MORMON RANGE WSA

COMMENT: The description of the Preferred alternative area appears to refer to the Wilderness Accent alternative, which would make more sense. The suitable acreage size and the statement of equivalence to the Resource Development alternative seem to be an afterthought. (DEIS, pp. 2-3/4)

COMMENT: Absolutely no rationale is given anywhere for such a drastic reduction in suitable acreage. Therefore, refuting the BLM's proposal is somewhat more difficult. I can only proceed using hypothetical reasons on the part of BLM, since they disdain to speak for themselves.

BLM ALLEGATION 1: "Exclusions are made along the eastern boundary to remove closely spaced cherrystemmed roads and bajada areas presenting future and current ORV manageability problems." (DEIS, p. 2-3)

RESPONSE: When the ways described in WTR, pp. 25/26, are plotted on a map, all those on the eastern side lie between the way to the Whitmore "Mine" and the way to Horse Spring. They are said to be about a mile long. The proposed boundary is pulled back 5 to 6.5 miles from the WSA boundary in the Preferred alternative. No explanation is given for the acreage reduction on the eastern margin north of Horse Spring way. Pushing the boundary back this far for ways this short is grossly unwarranted and absurd. Such a pullback totally ignores ALL of the extensive crucial quail habitat, 60% of the crucial bighorn summer range, and about 3500 acres of crucial tortoise habitat. "Control of ORV use would benefit desert tortoise, which occupy considerable portions of the southern and southwestern bajadas of this WSA." (WTR, p. 29)

BLM ALLEGATION 2: "On the southwestern bajada, large blocks of mining claims and gentle terrain create probable future manageability problems and this area was consequently excluded." (DEIS, p. 2-4)

RESPONSE: First, the claims are blanket lode claims covering over 11000 acres of the WSA. Each lode claim in the "blanket" must have a valid discovery in order to be a valid claim. Elsewhere such blanket lode claiming has been found to be fraudulent and the stakers have been prosecuted. No locatable minerals are known to exist in the WSA in validatable amounts. Until such validation is made, the claims should have no standing with respect to reduction of acreage from the WSA. Second, the bajada area is at best 5 miles wide. The Preferred alternative pushes the boundary back an additional 4 or more miles into extremely rugged territory without any comment or justification. This causes additional loss of crucial summer bighorn range and several thousand additional acres of crucial tortoise habitat. Such a reduction is totally unjustified and unwarranted.

BLM ALLEGATION 3: "An area to the north of the preceding bajada discussed was also excluded because of ORV manageability problems in the future and because wilderness values are low there." (DEIS, p. 2-4)

RESPONSE: I can not actually tell where this area is, but I will assume it is north of the way to Davies Spring and south of the cherrystem to the former vermiculite area. The same response to Allegation 2 above is given here.

10 QUESTION: Why do the WTR and DEIS essentially ignore the great amount of crucial habitats for bighorn (both summer and year-long ranges), tortoise, and quail.

11 QUESTION: Why is the term "core" used with three different meanings? First, the "core" is described as having about 86,000 acres (52,000 acres recommended as not suitable and 23,960 recommended as suitable — DEIS, p. 4-17). Second, the DEIS, p. 4-27, speaks of a "predominating 88,000 acre core" while, thirdly, in some instances the "core" contains only 23,960 acres, as in the statement: "The core portion of this unit is recommended as suitable." (DEIS, p. 2-3) This kind of sloppy terminology is used throughout the WTR and DEIS and leads to great confusion.

PRESUMED BLM ALLEGATION 4: The remainder of the non-suitable areas in the Preferred alternative has ORV management problems. (No other explanation is offered except management problems.)

RESPONSE: "The western, northwestern, and portions of the northern bajadas will remain largely unscathed because their incised rough terrain renders travel, particularly across the grain, difficult." (DEIS, p. 4-18) "The northwest and western bajadas are incised enough that ORV cross country travel is very difficult, and thus this area is manageable as wilderness over the long term." (DEIS, p. 4-20)

12 QUESTION: If so, what is the rationale for removing these areas from the WSA?

QUESTION: Why is it considered a beneficial impact to protect somewhat less than 1/3 of the area's ungulate habitat, without any rationale for the removal of the other 2/3, when "the area is so rugged that the only likely impact of non-designation would be helicopter installed communications facilities on the higher peaks" (DEIS, p. 4-19)? Why is this rugged terrain removed?

QUESTION: Why is the Moapa Peak area excluded from recommendation when the following is stated by BLM in the impact analysis for no designation as wilderness: "This alternative would result in the core region (presumably the 88,000 acre core) and Moapa Peak area remaining intact as de facto wilderness because of the combination of extremely rough terrain and lack of any enticement for someone to construct an expensive road." (DEIS, p. 4-30)? Absolutely no rationale is given for this exclusion.

QUESTION: Why is "the loss of moderate and outstanding values in fairly extensive portions of the area surrounding the central "core" accepted without justification when this is viewed as a significant adverse impact? (DEIS, p. 4-30)

QUESTION: Why is the Wilderness Accent alternative unacceptable as given in the Wilderness Accent Impact section titled "Wilderness" in the DEIS, p. 4-40? This alternative seems very sensible and should be the Preferred alternative. The acreage so described should be recommended as suitable. No significant negative impacts are identified in either the WTR or the DEIS. (WTR, p. 31)

13 QUESTION: Why is there no ORV restriction in the IMP for the eastern and southwestern bajada areas if wilderness values are endangered or degraded in these areas?

QUESTION: Is there an IMP for the Mormon Mountains WSA? If so, would you please send me a copy?

COMMENT LETTER 53

7

Pending responsible answers to the questions posed, and in view of BLM's own statements, the acreage defined in the Wilderness Accent alternative for the Meadow Valley Range and the Mormon Mountains WSAs must be recommended as the minimum acreage suitable for wilderness. No significant negative impacts are shown for either. Management as wilderness has been defined as feasible for both, by the BLM itself. And significant beneficial impacts would result from such a recommendation for designation.

I thank you for your consideration of these comments.

Sincerely,

Paul C. Clifford

Paul C. Clifford
2955 Berkshire
Cleveland Heights, Ohio 44118

RESPONSE LETTER 53

Response to Letter 53

1. Manageability as a discriminator has been removed from discussion in the EIS because it is not an ennvironmental issue. Manageability will be considered in the Wilderness Study Report.

2. These claims, alone, were not used to remove this portion from the area recommended as suitable. These acres are somewhat physiographically separated from the rest of the WSA and exhibit low wilderness values.

3. Through this plan amendment process, the manager decided that management of the area's resources would be better served through the wider variety of options available through non-wilderness management.

4. The reference to "benefit" has been removed.

5. See Response 3. Approximately twenty-five to thirty percent of the central bajada is included within the area recommended as suitable in the Proposed Action.

6. The terms "Vigo Wash" or "Vigo Canyon drainage" are intended to refer to the entire northeastern portion of the WSA. It may be possible to block the wash (with repairs following flood events) where the canyon walls are steep and enclose the stream channel. The upland portion is not incised, but a rolling gently sloping plain. Its wilderness values are not exceptional, especially when compared to some of the other portions of the WSA. It was felt by the team and management, that wilderness designation for this portion would not substantially increase the quality of the portion recommended as suitable in the Proposed Action.

7. No ORV events have been authorized within the WSAs in the Caliente Resource Area.

8. ORV use is not currently degrading the Bunker Hills, central bajada and Vigo Wash areas. The only area currently evidencing noticeable use is the flatter, upper watershed area of Vigo Wash. Here, there are numerous ways which could be rehabilitated if they could be effectively closed.

9. Yes.

10. While the restrictive status of wilderness would provide more certain habitat protection, other means also exist to provide protection, including ACECs, ORV designations and mitigating stipulations in various authorizations. Chapter 3 text and maps identify the presence and extent of these species' habitat. The non-wilderness development scenarios upon which the impact analysis is based show no specific impact to any of these species. It is recognized that activities which may occur in these areas if not designated as wilderness could affect the habitat under some circumstances.

11. These references to "core" have been written more precisely in the FEIS.

RESPONSE LETTER 53

12. We have reconsidered the recommendations for the Mormon Mountains WSA and have recommended the Wilderness Accent alternative as the Proposed Action. As to "accepted without justification", the purpose of an EIS is to analyze and identify the environmental effects of various alternatives, but not to provide justification.

13. They are not presently endangered or degraded. There is an IMP. Also see the IMP discussion in Response 6.

COMMENT LETTER 54

1

December 31, 1984

Mr. Kemp Conn
District Manager
Bureau of Land Management
4765 West Vegas Drive
Los Vegas, Nevada 89126

Dear Mr. Conn,

I submit the following comments and questions for inclusion in the official comments on the Delamar Mountains Wilderness Study Area (NEV-050-0177) contained in the Caliente Draft Wilderness Environmental Impact Statement (INT-DES 84-52).

BLM Allegation #1 "This (Preferred) alternative would designate 0 acres as wilderness." (DEIS p. 4-14)

Response: This alternative is totally unacceptable and is not supported by the results of the wilderness study process nor is it permitted by the BLM Wilderness Study Policy and Planning Criteria (WSPPC), which while not published in this DEIS is to be found on page 7-28/29 as Appendix J in the Laboutan DRMP and DEIS (INT DRMP/DEIS 83-66). This policy states "The primary goal of the BLM wilderness study process is to recommend for wilderness designation those areas for which it has been determined, through the multiple resource planning process and public involvement, that wilderness is the most appropriate alternative use of the land and its resources. The two planning criteria and six quality standards described below will be used in making the analysis on which that determination will be based. These criteria and quality standards will be applied to wilderness study areas (WSAs) through the BLM planning process, and each criterion and quality standard will be fully considered and documented in determining whether a WSA is more suitable for wilderness or for other uses and in making all BLM wilderness recommendations, both "suitable" and "nonsuitable" (Emphasis added) (83-66 p. 7-28). This has not been met in arriving at the proposed action. See below.

Criterion #1: Evaluation of Wilderness Values

1. Mandatory Wilderness Characteristics.

BLM ALLEGATION "Although the WSA meets the criteria of possessing outstanding wilderness values in scattered localized areas, it does not exhibit a high degree of attractiveness in substantial portions of its area which tends to mitigate the effect of nondesignation on wilderness values" (DEIS p. 4-14).

Response: 1) The WSA may be assumed to have the mandatory characteristics to some degree since it survived the inventory process. Ultimately it is irrelevant if the values are outstanding or low - they exist. "Within the WSA, most of the area appears natural and wild" (WTR p. 12). "The WSA lends itself to all types of primitive recreational opportunities, however, some precautions must be undertaken to assure water is available in order to allow for any extended time periods. The size of the unit and excellent topographic diversity make these recreational opportunities outstanding" (WTR p. 13). 2) The outstanding values as determined by BLM are not "scattered" but are mostly contained in the compact area of 48,164 acres of the Resource Development alternative (DEIS p. 4-33). 3) In order to find the area "not suitable" a significant adverse impact must be shown to some other criteria.

1 Question: What is the significant adverse impact(s) which documents the reason for excluding all of this WSA from recommendation as wilderness?

2 Question: Why are outside influences repeatedly involked when they are clearly placed outside of consideration by the Federal Court California RARE II decision?

Question: Why is the necessity for a buffer zone implied outside of the WSA when this is clearly forbidden by Wilderness Management Policy which states: "No buffer zones will be created around wilderness areas to protect them from the influence of activities on adjacent land" (WMP p. 13)?

Component #2 Special Features

BLM ALLEGATION "The following supplemental values, occurring within the WSA, add to the wilderness experience within the WSA: zoological, geological, botanical, and cultural features " (DEIS p. 3-22).

Response: A rather bland paragraph follows the above in the DEIS. In fact, "the southern, southwestern, and southeastern bajadas contain several thousand acres of tortoise crucial habitat" (sic) (WTR p. 14). When evaluated on the Delamar Wildlife Habitat Map (DEIS end of chapter 3) the "several thousand acres" are found to be about 10,000 acres. This is 23% of the crucial desert tortoise habitat found in the entire Resource Area (DEIS p. 4-23). The "over one dozen prehistoric sites" (DEIS p. 3-22) turn out to "include open lithic and ceramic scatters, rock shelters, rock art (pictograph) sites and milling sites" (WTR p. 14). All of these types of site are extremely sensitive to disturbance. All would be significantly benefited by designation as wilderness. 15% of the Resource Area's yearlong bighorn sheep habitat occurs in the southern and southeastern portions of the WSA (DEIS p. 4-23 and Delamar Wildlife Habitat Map -end of chapter 3). There is a Management Framework Plan decision calling for a bighorn sheep reintroduction in the Delamars (DEIS p. 3-23). The botanical and geological features are reasonably covered (DEIS p. 3-22).

3 Question: Why are the crucial tortoise habitat, bighorn habitat reintroduction plan, and cultural resources not given greater consideration in the Preferred alternative?

Component #3 Multiple Resource Benefits

This component does not seem to be specifically addressed in the DEIS.

Response: "The general benfits to other multiple resource values and uses which wilderness designation of the area could ensure are as delineated in the Preface" (WTR p. 14). Note: They are in fact well set forth on WTR p. 1/2 "Important wildlife habitats exist within this WSA" (see Criteria 2 above). Designation of the unit would benefit these species (desert tortoise, bighorn sheep, deer) by prohibiting ORV use and by maintenance of more natural habitat conditions. (WTR p. 14/15)

Question: Why are the multiple resource benefits not given any real consideration in the Preferred alternative?

Component #4 Same as DEIS.

Criterion #2: Manageability

BLM ALLEGATION #1 "Two management problems affecting the unit are vehicle access control in portions and the paralleling utility corridor external to the WSA's western boundary. One could preclude the assurance of manageability in accessible areas over the long term for wilderness. The other would have a depreciative effect on the southwestern sections" (WTR p. 15/16).

Response: "At present motorized access is not a problem in the WSA" (DEIS p. 3-21). "There are no private lands within the WSA" (DEIS p. 3-22) which might require future access. "There are no mining claims within the WSA" (DEIS p. 3-22) which might require future access or be developed. The alleged conflict with a court agreement does not really exist because the development of a water supply near the Pony Well road (DEIS p. 3-22) is in fact a previously existing right of the allotment holder. BLM must meet the court order while doing the least practical violence to the wilderness values. This would be required under the IMP anyway unless development is delayed on the chance that Congress might act to release the WSA from further consideration. Other specific potential access problems will be discussed below. The conflict with an expanded utility corridor is not an "access manageability" problem and will be addressed under Quality Standard #2.

BLM ALLEGATION #2 "On the north adjoining Delamar Dry Lake ORVs have been a problem and wilderness values are not outstanding" (DEIS p. 2-3). "Flatter land on the northern end of the WSA is transected by a way frequently used as a cut off route. Use of this route and adjacent land would be difficult to control and would destroy the low wilderness values there" (DEIS p. 3-22).

Response: This is a legitimate problem and the boundary of the recommended area should be pulled back to that shown by the Wilderness Accent alternative on the Delamar Mountains alternative map (DEIS - map at beginning of chapter 2).

BLM ALLEGATION #3 "On the south side the terrain is a bajada cut by washes which extend as canyons into the mesa like country of the WSA's southern region. Hunters and occasional ORVers use this bajada and the washes leading north. Long term maintenance of wilderness values on the bajada would be difficult due to the outside influences (not pertinent) and ease of access" (DEIS p. 4-21).

Response: "Occasional ORV use, probably associated with hunting, is occurring in Bomber Wash. This could probably be controlled, but would not seriously jeopardize wilderness values even if it was not. This is due to the fact that only the active wash can be driven. Due to precipitous terrain or lack of access through precipitous terrain, the rest of the suitable area can be readily managed as wilderness for the long term" (DEIS p. 4-33). "Occasional use of the canyons is confined to the active portion of the wash and wouldn't be a major problem" (DEIS p. 4-22). "Along the southern bajada there are occasional vehicle tracks leading cross country toward the interior of the unit but the only noted vehicular access taking place is up the Bomber Wash for hunter access. This impact is very light and not of a significant nature" (DEIS p. 3-20/21). "On the southern end, the mesa tops have low to moderate wilderness values while the canyons have moderate to outstanding values" (DEIS p. 4-33). Additionally, this southern bajada area is a major portion of the crucial desert tortoise habitat and much of the yearlong bighorn sheep habitat. This habitat value far outweighs a minor vehicular intrusion problem.

4 Question: In light of the response above, why is the southern area excluded from all alternatives except all wilderness?

BLM ALLEGATION #4 "All washes and most of the terrain in the south and east are accessible to vehicular travel." "Control would be difficult" (WTR p. 15). "Bajadas and gentle terrain on the southeastern and eastern side would be hard to manage as wilderness for the long term. Short cherrystems and old ways are frequently used by local and metropolitan area hunters and trappers. Use of these would be difficult to control" (DEIS p. 3-22).

Response: The above comments are directed at two very different terrains. "Access along the east side (north of the way or cutoff to Willow Spring) is restricted to the boundary road and the short way leading to the stock reservoir. The terrain limits use and control would take care of itself (WTR p. 15). The southeastern portion on the bajada is mostly affected by the three mile road to Willow Spring. and the old cutoff (old county road) to Willow Spring. These make a triangle with the boundary road. The area within this triangle should not be recommended as wilderness. Much of the rest of the bajada area would have essentially the same response as BLM allegation #3 above including specifically the crucial desert tortoise habitat. Additionally, "Current use patterns are low due to the distance of travel for planned destinations. Little evidence of such use persists on the ground" (WTR p. 15). While wilderness values may be lower, the impact of nondesignation on this area of crucial desert tortoise habitat is extremely adverse.

BLM ALLEGATION #5 "The western portion of the WSA consists of a large bajada extending from highway 93 eastward, for several miles to the more rugged terrain of the Delamar Mountains themselves. While not currently being subjected to significant ORV use, the terrain in the washes is susceptible to such use" (DEIS p. 2-7). "The western bajada is very susceptible to ORV use in the future because of its terrain and proximity to highway 93" (DEIS p. 2-3).

Response: "On the western bajada, several, (sic) almost obscure, ways try to make it up into the WSA, but natural terrain stops them after a half mile or so. Some of the larger washes do show a single track or two of random ORV exploration or hunting enthusiasts" (DEIS p. 3-20). "Access along the west side of the WSA does not appear to be too much of a problem at the present time. Casual and random use has occurred up several washes. The terrain, however, does not level itself to ready access. Maintaining control along this boundary would prove to be a challenge, but not insurmountable " (WTR p. 15). In addition since this is a US route highway there is now or very soon should be a stock control fence along the entire length of the WSA adjacent to the highway. Keep the access gates locked or leave them out altogether and

what little access problem exists will be largely ended.

BLM ALLEGATION #6 "The access off the Pony Reservoir road and Gregorson Basin road provides ample opportunity to leave the known routes. Closing the existing ways and controling this random travel would be nearly impossible" (WTR p. 15).

5 Response: There is potential for a problem in this area. However, there is a ready solution to most of the potential problem. In no sense has BLM asked for cooperation from the public to maintain wilderness values. Corny, isn't it? But seriously, BLM talks of tracks and ways and going up washes with ORVs as though the ORVers are currently doing something illegal while the BLM is spending all sorts of time and effort chasing them over the hills. This is not true. As of July of this year there were NO vehicular restrictions in any of the 5 WSAs in the Caliente RA. I was there. I specifically asked. You cannot expect cooperation from the public if you do not even tell them what you want or don't want them to do. Try it. It might even work.

Quality Standard #1

BLM ALLEGATION "Strategic or critical mineral materials and minerals with a greater than 50% import reliance are not known or inferred to occur. Using the classification...and rational for determining the threshold level of significant impact....there is no significant impact (with designation of the entire WSA as wilderness)" (DEIS p. 4-23).

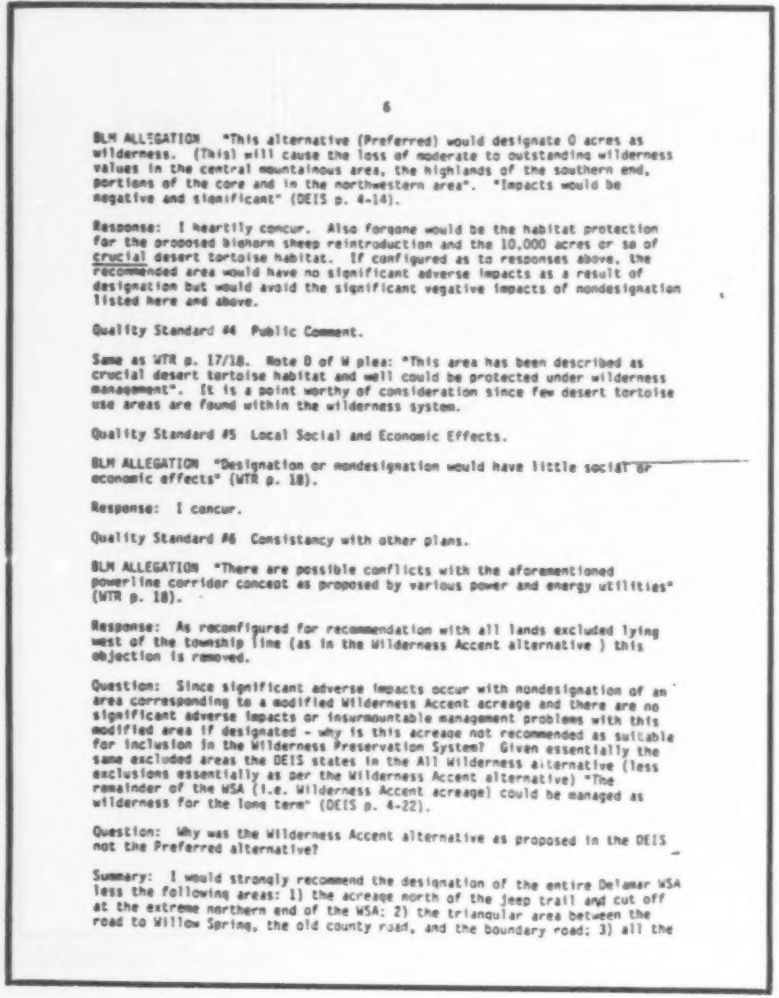
Response: "No mining claims exist within or near this WSA. No known historic mining or production has occured (except sand and gravel for local roads)" (WTR p. 15). I concur with BLM.

Quality Standard #2 Impacts on other resources.

BLM ALLEGATION "A need has been identified (Intermountain Power Project and White Pine Power Project) to expand the existing utility corridor bordering the west side of the WSA. This corridor serves local and growing western regional needs. The withdrawn area and topography restrict expansion opportunities to the west while the WSA and topography are similarly restrictive on the east. A narrow strip of suitable topography between the mountains and the highway on the WSA's west side would be included in this alternative (all wilderness) and this would have a significant adverse impact in terms of use of this corridor. The consequent reduction in utility line placement flexibility may impact other resources (e.g. visual resource) by limiting the location of the powerline itself. Therefore, this alternative would have a significant adverse impact to the lands program, but is limited to the western bajada area of the WSA." (DEIS p. 4-23/24).

Response: This is a legitimate concern. The western boundary of the designated area could well be run along the township line on the western side of the WSA as in the Wilderness Accent alternative. Note that this conflict only involves the western bajada area of the WSA. No other significant adverse impacts were noted in either DEIS or WTR should designation occur.

Quality Standard #3 Impact of nondesignation on Wilderness Values.



6

BLM ALLEGATION "This alternative (Preferred) would designate 0 acres as wilderness. (This) will cause the less of moderate to outstanding wilderness values in the central mountainous area, the highlands of the southern end, portions of the core and in the northwestern area". "Impacts would be negative and significant" (DEIS p. 4-14).

Response: I heartily concur. Also forgone would be the habitat protection for the proposed bighorn sheep reintroduction and the 10,000 acres or so of crucial desert tortoise habitat. If configured as to responses above, the recommended area would have no significant adverse impacts as a result of designation but would avoid the significant vegative impacts of nondesignation listed here and above.

Quality Standard #4 Public Comment.

Same as WTR p. 17/18. Note D of W plea: "This area has been described as crucial desert tortoise habitat and well could be protected under wilderness management". It is a point worthy of consideration since few desert tortoise use areas are found within the wilderness system.

Quality Standard #5 Local Social and Economic Effects.

BLM ALLEGATION "Designation or nondesignation would have little social or economic effects" (WTR p. 18).

Response: I concur.

Quality Standard #6 Consistancy with other plans.

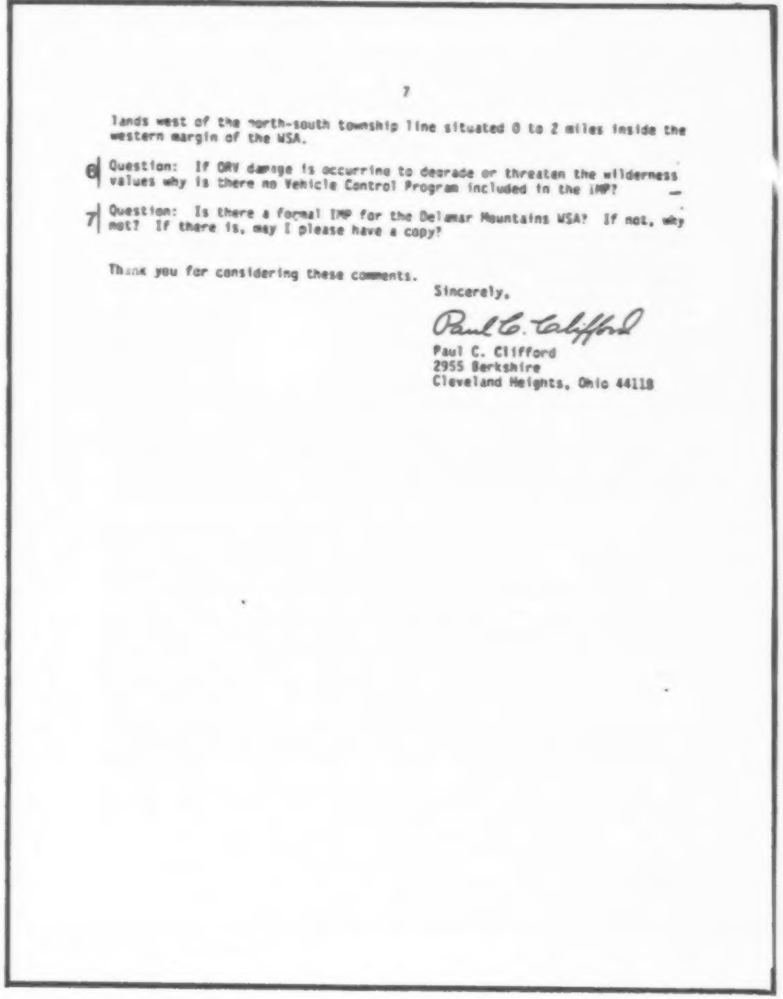
BLM ALLEGATION "There are possible conflicts with the aforementioned powerline corridor concept as proposed by various power and energy utilities" (WTR p. 18).

Response: As reconfigured for recommendation with all lands excluded lying west of the township line (as in the Wilderness Accent alternative) this objection is removed.

Question: Since significant adverse impacts occur with nondesignation of an area corresponding to a modified Wilderness Accent acreage and there are no significant adverse impacts or insurmountable management problems with this modified area if designated - why is this acreage not recommended as suitable for inclusion in the Wilderness Preservation System? Given essentially the same excluded areas the DEIS states in the All Wilderness alternative (less exclusions essentially as per the Wilderness Accent alternative) "The remainder of the WSA (i.e. Wilderness Accent acreage) could be managed as wilderness for the long term" (DEIS p. 4-22).

Question: Why was the Wilderness Accent alternative as proposed in the DEIS not the Preferred alternative?

Summary: I would strongly recommend the designation of the entire Delamar WSA less the following areas: 1) the acreage north of the jeep trail and cut off at the extreme northern end of the WSA; 2) the triangular area between the road to Willow Spring, the old county road, and the boundary road; 3) all the



7

lands west of the north-south township line situated 0 to 2 miles inside the western margin of the WSA.

6 Question: If ORV damage is occurring to degrade or threaten the wilderness values why is there no Vehicle Control Program included in the IMP?

7 Question: Is there a formal IMP for the Delamar Mountains WSA? If not, why not? If there is, may I please have a copy?

Thank you for considering these comments.

Sincerely,

Paul C. Clifford

Paul C. Clifford
2955 Berkshire
Cleveland Heights, Ohio 44118

RESPONSE LETTER 54

Response to Letter 54

1. The major conflict with this WSA is the need for a utility corridor on its western side. The remainder of the area was recommended as nonsuitable because the manager, through this plan amendment process, decided that management of the area's resources would be better served through the wider variety of resource management options available under non-wilderness management.

2. The EIS has been completely revised and addresses your comments. In the process, references to outside influences and to buffers have been deleted.

3. While the greater restrictions and increased patrol activities in designated wilderness would provide greater protection to these resources, other means are available to accomplish this, if necessary. These include ACEC's, ORV designations and mitigating stipulations in various authorizations.

4. They were considered in the Plan Amendment process, but none of the other resource values are so critically dependent on wilderness designation that they can be protected by wilderness designation and by no other means.

5. The southern area was excluded because it is relatively flat and not particularly attractive to the wilderness recreation user. In order to have a full array of alternatives to analyse, it was sometimes necessary to discriminate based on fine shades of resource value differences. Otherwise, in this case, the Wilderness Accent and All Wilderness alternatives would have been essentially the same because of the low wilderness values on the bajada which comprises most of the southern portion of the WSA.

6. There were no ORV restrictions until the ORV designation for the Caliente Resource Area was signed December 5, 1984. Under the Interim Management Plan (IMP) (III.A.3), the historic level of use such as casual ORV use of ways is permitted so long as it does not degrade wilderness values. Unless the area is designated closed or limited under ORV designations, in the absence of wilderness impairment, it remains open to ORV use. Once designated as wilderness, only specifically authorized ORV use is permissible. All other use is illegal even though it may not damage wilderness qualities significantly. The December 1984, ORV designations restrict ORVs as necessary to effect resource protection.

7. There is an IMP.

COMMENT LETTER 55

27 December, 1984

Mr Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas, NV 89126

Dear Mr. Maxwell:

I am aware that draft wilderness recommendations were recently issued for five wilderness areas in the Caliente Resource area. I have spent a considerable amount of time in these locations and realize their value as potential wilderness areas.

The Mormon Mountains offer some of the best rock formations in the world. The limestone peaks and cave systems are a geologist's dream! These areas should be left untouched so they should have all their aesthetic value. The acreage proposed is much too small, and its boundaries are damaging. They cut straight across ridges and canyons. Please reconsider and allocate 123,132 acres as wilderness and help preserve the land and its inhabitants including the desert tortoise, desert bighorn, mule deer, and quail.

The South Pahroc Range is a unique area and to open this land to development would cause irreparable harm. This area is intricately dissected with canyons and crevices like no others on earth. The Pahroc Range also boasts a wide range of coniferous vegetation unlike any area I've seen. Please make sure the 28,325 acres proposed for wilderness is definitely set aside.

I also feel that the 37,180 acres proposed in the Meadow Valley Range is much too small. To develop the bajada would greatly upset the ecological balance. This alluvial fan type area is a wonder of nature and should be left untouched for all us to enjoy. Please consider the 104,500 acres which includes the bajada.

OVER

COMMENT LETTER 55

The Clover Mountains encompass an entire watershed network. Let's preserve this whole area to ensure clean water and to retain the delicate ecological balance. Please try to ensure that this area of 88,000 acres is indeed left a wilderness.

Last and probably most important are the Delamar Mountains, which at present, are not even being considered as a wilderness area. This immense plateau, which is sparsely covered with juniper, is also dissected by an intricate canyon network that is incredible. These canyons are even more beautiful than those of Utah. It is a paradise. Please ensure that this 102,430 acre area is preserved in its natural state.

Mr. Maxwell, I respectfully request that you consider the enormous value of these natural areas. Remember, once these lands are opened up, the damage done would be irreversible. There is much more land available for development, and I think it would be a grave mistake to destroy these wonders of nature. Thank you

Sincerely,

Carolyn S. Cole
NOAA Ship McArthur
Pacific Marine Center
1801 Fairview Ave East
Seattle, WA 98102-3767

COMMENT LETTER 56

P.O. Box 702
Winnemucca, NV 89445
January 10, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

I am writing to express my concern for the wilderness values of the Wilderness Study Areas in the Caliente Resource Area of Lincoln County.

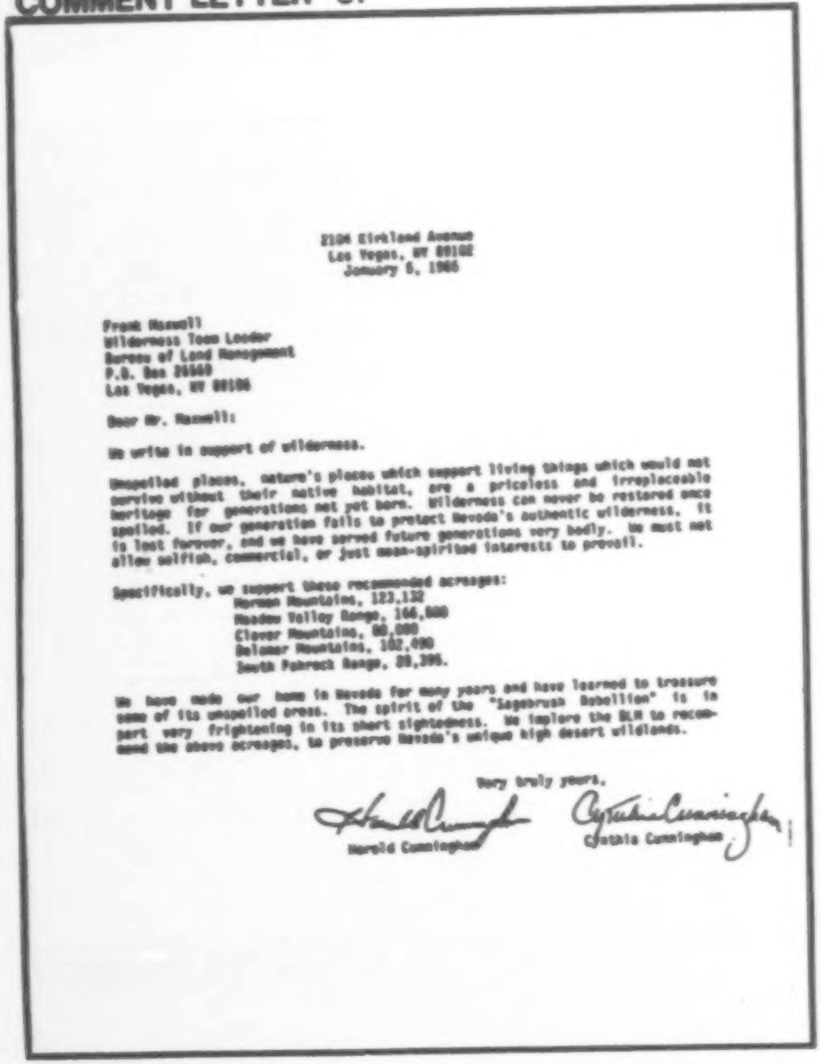
I feel strongly that the five WSAs under consideration--the Mormon Mountains (123,132 acres), Meadow Valley Range (166,500 acres), Clover Mountains (88,000 acres), Delamar Mountains (102,490 acres) and South Pahrock Range (28,395 acres)--all deserve wilderness protection and would make a beautiful and unique addition to our wilderness system. As you probably know, there is nothing like these areas presently under wilderness protection.

I urge you to recommend that these areas be preserved by Congress in the acreages specified above.

Very truly yours,

Doug Conner

COMMENT LETTER 57



2104 Kirkland Avenue
Las Vegas, NV 89102
January 5, 1986

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89126

Dear Mr. Maxwell:

We write in support of wilderness.

Unspoiled places, nature's places which support living things which would not survive without their native habitat, are a priceless and irreplaceable heritage for generations not yet born. Wilderness can never be restored once spoiled. If our generation fails to protect Nevada's authentic wilderness, it is lost forever, and we have served future generations very badly. We must not allow selfish, commercial, or just mean-spirited interests to prevail.

Specifically, we support these recommended acreages:
Mormon Mountains, 123,132
Meadow Valley Range, 166,600
Clover Mountains, 98,000
Delamar Mountains, 102,490
South Pahroc Range, 28,395.

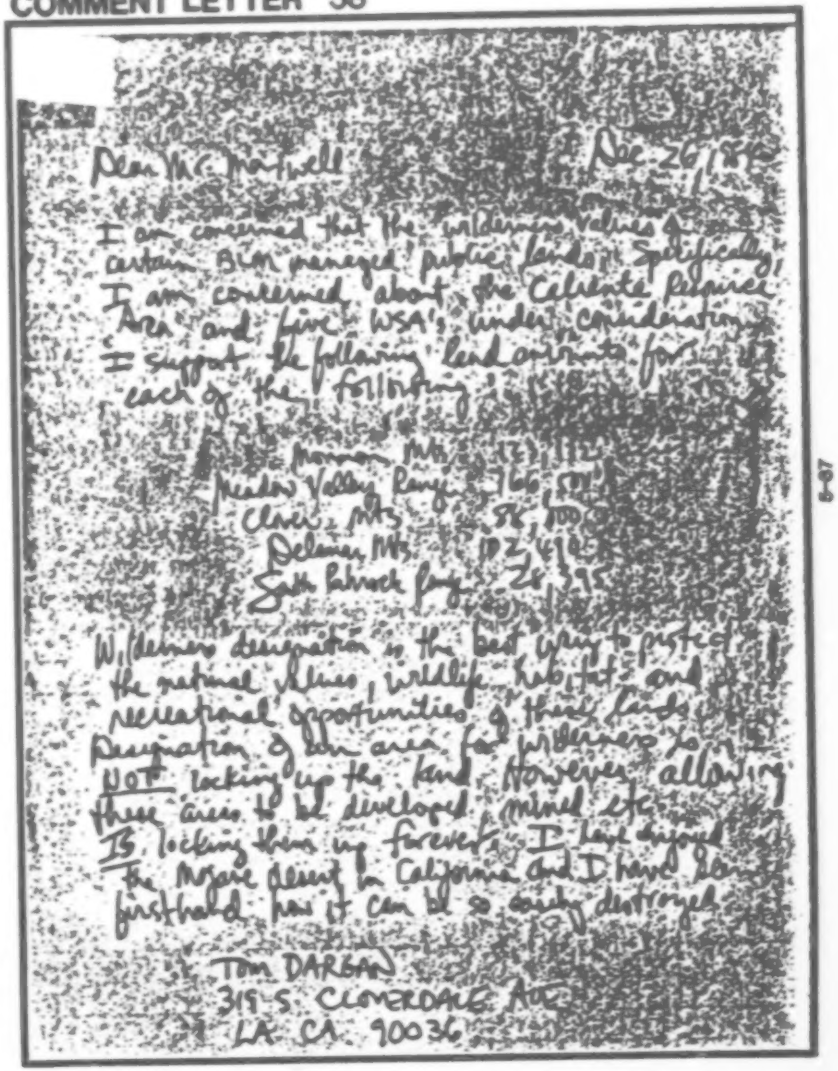
We have made our home in Nevada for many years and have learned to treasure some of its unspoiled areas. The spirit of the "Sagebrush Rebellion" is in part very frightening in its short sightedness. We implore the BLM to recommend the above acreages, to preserve Nevada's unique high desert wildlands.

Very truly yours,

Harold Cunningham
Harold Cunningham

Cynthia Cunningham
Cynthia Cunningham

COMMENT LETTER 58



Dear Mr. Maxwell
Dec 26 '85

I am concerned that the wilderness values of certain BLM managed public lands. Specifically I am concerned about the Caliente Resource Area and five WSA's under consideration. I support the following land amounts for each of the following:

Mormon Mts 123,132
Meadow Valley Range 166,600
Clover Mts 98,100
Delamar Mts 102,490
South Pahroc Range 28,395

Wilderness designation is the best way to protect the natural values, wildlife habitat, and recreational opportunities of these lands. Designation of an area for wilderness is NOT locking up the land. However allowing these areas to be developed, mined etc. IS locking them up forever. I have enjoyed the Mojave desert in California and I have seen firsthand how it can be so easily destroyed.

TOM DARGAN
315 S. CLOVERDALE AVE
LA CA. 90036

COMMENT LETTER 59

de Recat & Associates, Inc
100 Post Street
San Francisco, California 94108
(415) 433-3047

January 7, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

I wish to register my strong support for the following five WSAs along with the recommended acreage to be permanently designated wilderness areas. This is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands.

Mormon Mountains	124,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delamar Mountains	102,490 acres
South Pahrock Range	28,395 acres

These vast unspoiled wildlands support a variety of wildlife including the mule deer, desert bighorn sheep and ferruginous hawks; and represent a very small piece of the 49 million plus BLM administered acres in Nevada—of which less than 5 million is being considered for wilderness. Is this so much, when over 40 million will most likely be turned over the developers?

The Mormon Mountains have an exceptional cave system. The Meadow Valley Range designation should include the huge bajada. The Clover Mountains offer an entire desert stream watershed. Although the Delamar Mountains are sparsely vegitated they are home to the mule deer and bighorn sheep and should also be protected for their deep twisting canyons.

I do agree with your recommendations for the South Pahrock Range. I also hope to preserve the canyons, domes, and spectacular settings for all who wish exceptional sights and solitude.

Please protect these five WSAs by designating them along with my recommended acreage as permanent wilderness areas.

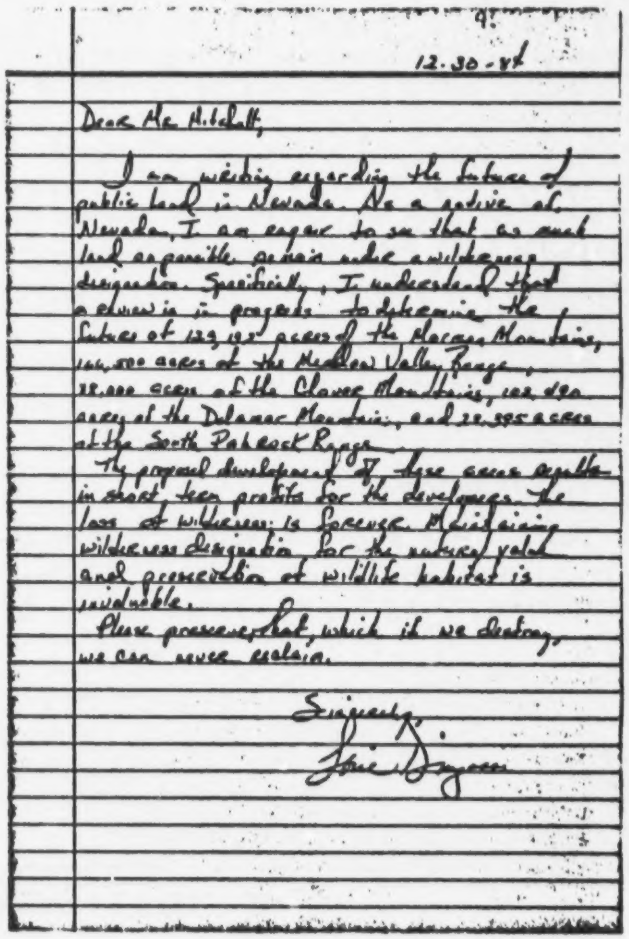
Thank you.

Sincerely,

Nicole B. de Recat

NBR:cmb

COMMENT LETTER 60



12-30-84

Dear Mr. Mitchell,

I am writing regarding the future of public land in Nevada. As a native of Nevada, I am eager to see that as much land as possible remain under a wilderness designation. Specifically, I understand that a decision is in progress to determine the future of 124,132 acres of the Mormon Mountains, 166,500 acres of the Meadow Valley Range, 88,000 acres of the Clover Mountains, 102,490 acres of the Delamar Mountains, and 28,395 acres of the South Pahrock Range.

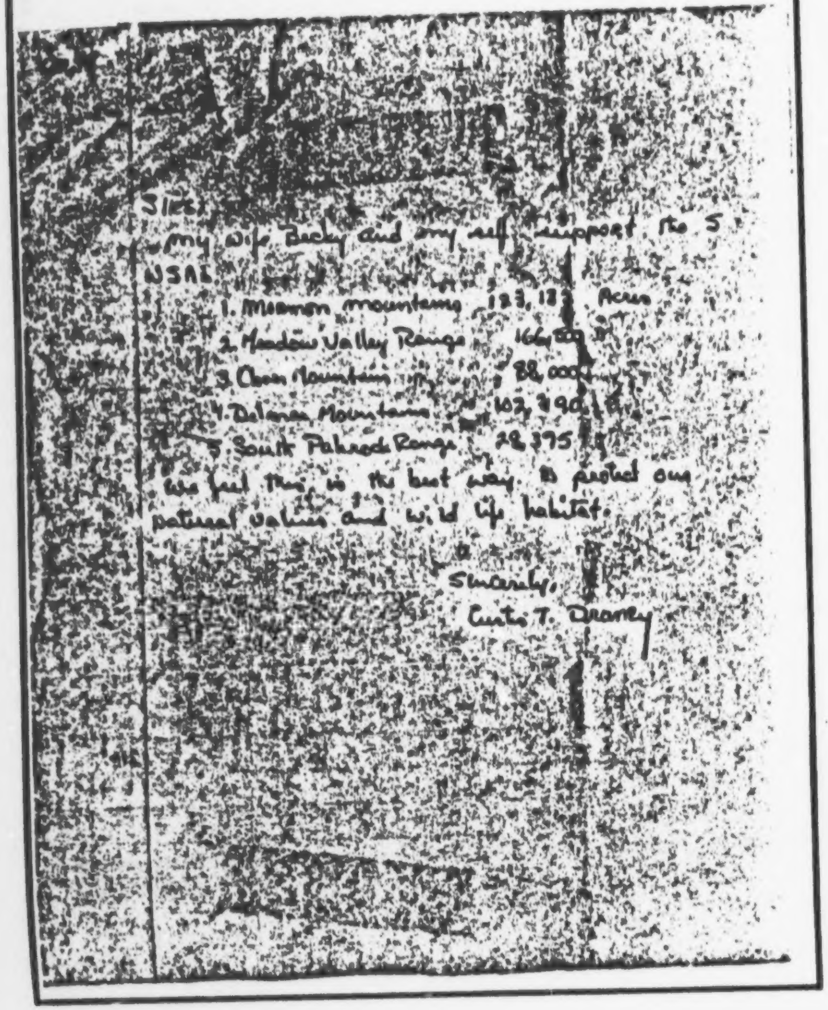
The proposed development of these areas results in short term profits for the developers. The loss of wilderness is forever. Maintaining wilderness designation for the natural value and preservation of wildlife habitat is invaluable.

Please preserve that, which if we destroy, we can never reclaim.

Sincerely,

best copy available

COMMENT LETTER 61



Sirs:

My wife Becky and my self support the 5 WSA's

1. Mormon mountains 123,13 Acres
2. Meadow Valley Range 166,500
3. Clover Mountain 88,000
4. Delamar Mountains 102,390
5. South Pahrock Range 28,375

We feel this is the best way to protect our natural values and wild life habitat.

Sincerely,
Curtis T. Draney

COMMENT LETTER 62

CARL T. DUBUY, M.D. Box 20085, Sparks, Nevada 89433-0085

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O.Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

We are writing to encourage your studies of the land for wilderness designation in the hope that the maximum area considered in each of the 5 Study Areas will be selected. In the case of the Mormon Mountains the thought of development in such a remote area seems so unlikely in value compared with its wilderness value in wildlife habitat that we would urge designation of 123,132 acres rather than the BLM recommendation of an areasms fifth that size. This would eliminate management problems.

In the case of the Meadow Valley Range the area should include the Meadow Valley Wash with a total of 166,500 acres rather than just the mountain ridge listed as the BLM recommendation. This seems more logical as a geographic and ecological entity.

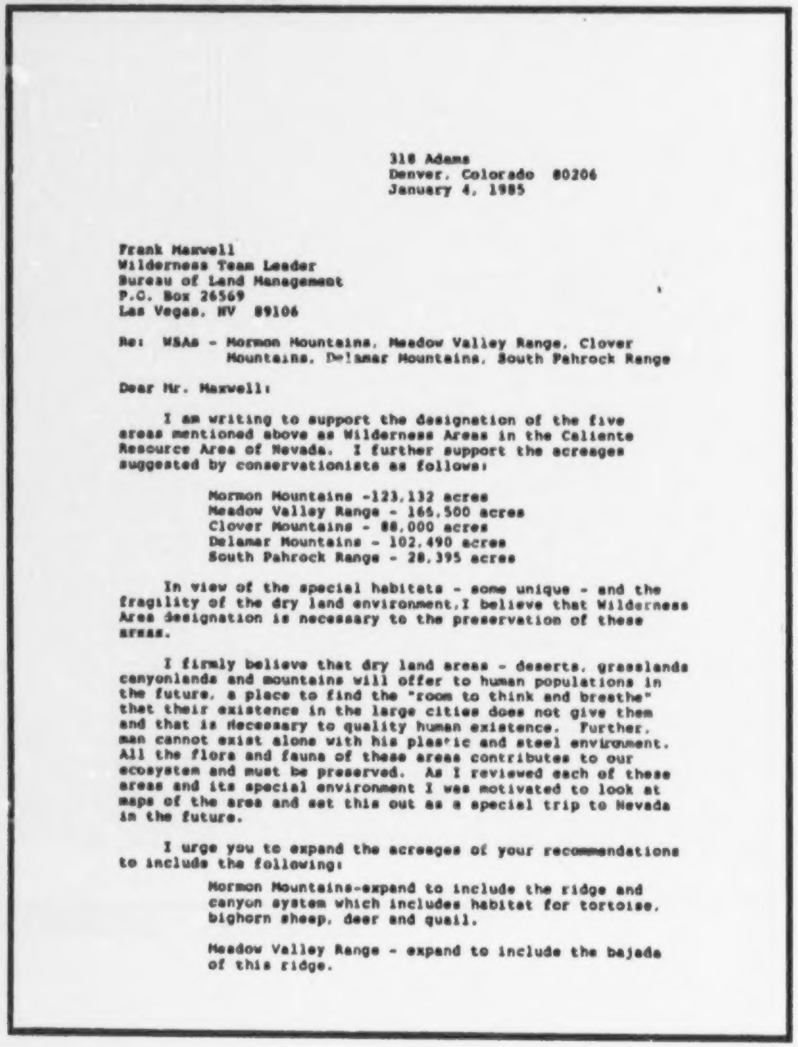
The Clover Mountains Wilderness Study Area should be expanded to include the entire Cottonwood Canyon watershed of 88,000 acres, a unique opportunity for wilderness preservation for posterity.

The Delamar Mountains should be seriously considered for wilderness designation as part of the Study especially because of its bighorn sheep habitat as well as mule deer to include 102,490 acres as recommended by conservationist groups. We certainly concur and commend the BLM recommendation of the South Pahrock Range for 28,395 acres of wilderness.

We are particularly concerned that this golden opportunity for wilderness preservation in our last untrammeled areas of our lower 48 states be seized to insure its preservation for all our people as "development" is threatening us on all sides. The need for designated wilderness becomes more urgent all the time.

Sincerely,
Carl T. Dubuy
Carl T. Dubuy, M.D.
Emilie I. Dubuy
Emilie I. Dubuy

COMMENT LETTER 63



318 Adams
Denver, Colorado 80206
January 4, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Re: WSAs - Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, South Pahrock Range

Dear Mr. Maxwell:

I am writing to support the designation of the five areas mentioned above as Wilderness Areas in the Caliente Resource Area of Nevada. I further support the acreages suggested by conservationists as follows:

Mormon Mountains -123,132 acres
Meadow Valley Range - 165,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

In view of the special habitats - some unique - and the fragility of the dry land environment,I believe that Wilderness Area designation is necessary to the preservation of these areas.

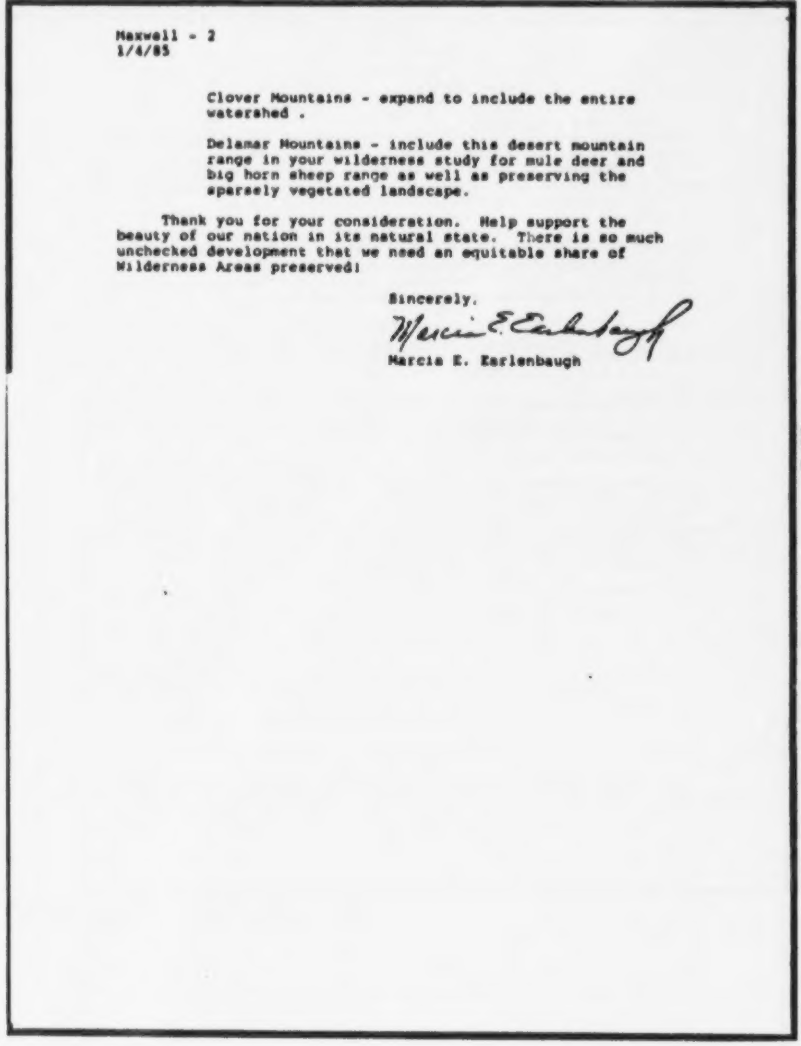
I firmly believe that dry land areas - deserts, grasslands canyonlands and mountains will offer to human populations in the future, a place to find the "room to think and breathe" that their existence in the large cities does not give them and that is Necessary to quality human existence. Further, man cannot exist alone with his plastic and steel environment. All the flora and fauna of these areas contributes to our ecosystem and must be preserved. As I reviewed each of these areas and its special environment I was motivated to look at maps of the area and set this out as a special trip to Nevada in the future.

I urge you to expand the acreages of your recommendations to include the following:

Mormon Mountains-expand to include the ridge and canyon system which includes habitat for tortoise, bighorn sheep, deer and quail.

Meadow Valley Range - expand to include the bajada of this ridge.

COMMENT LETTER 63



Maxwell - 2
1/4/85

Clover Mountains - expand to include the entire watershed .

Delamar Mountains - include this desert mountain range in your wilderness study for mule deer and big horn sheep range as well as preserving the sparsely vegetated landscape.

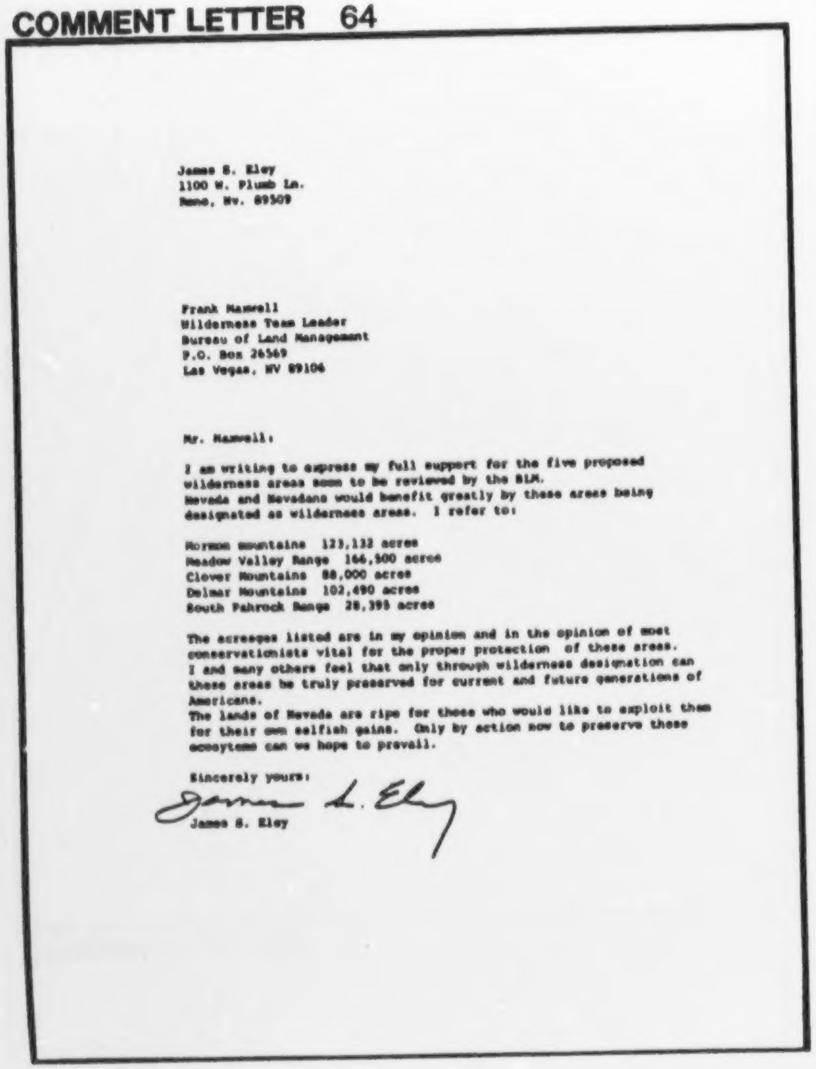
Thank you for your consideration. Help support the beauty of our nation in its natural state. There is so much unchecked development that we need an equitable share of Wilderness Areas preserved!

Sincerely,

Marcia E. Earlenbaugh

Marcia E. Earlenbaugh

COMMENT LETTER 64



James S. Eley
1100 W. Plumb Ln.
Reno, Nv. 89509

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Mr. Maxwell:

I am writing to express my full support for the five proposed wilderness areas soon to be reviewed by the BLM. Nevada and Nevadans would benefit greatly by these areas being designated as wilderness areas. I refer to:

Mormon mountains	123,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delmar Mountains	102,490 acres
South Pahrock Range	28,395 acres

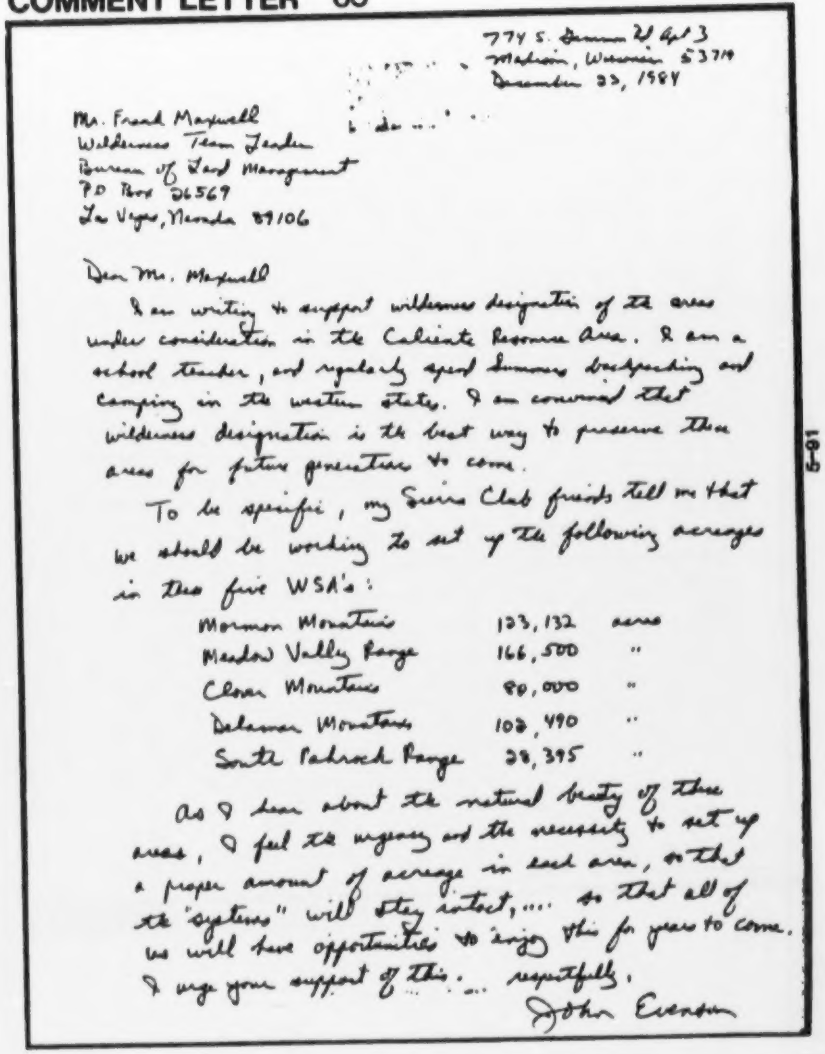
The acreages listed are in my opinion and in the opinion of most conservationists vital for the proper protection of these areas. I and many others feel that only through wilderness designation can these areas be truly preserved for current and future generations of Americans.
The lands of Nevada are ripe for those who would like to exploit them for their own selfish gains. Only by action now to preserve these ecosytems can we hope to prevail.

Sincerely yours:

James S. Eley

James S. Eley

COMMENT LETTER 65



774 S. [illegible] St Apt 3
Madison, Wisconsin 53714
December 23, 1984

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell

I am writing to support wilderness designation of the areas under consideration in the Caliente Resource Area. I am a school teacher, and regularly spend summers backpacking and camping in the western states. I am convinced that wilderness designation is the best way to preserve these areas for future generations to come.

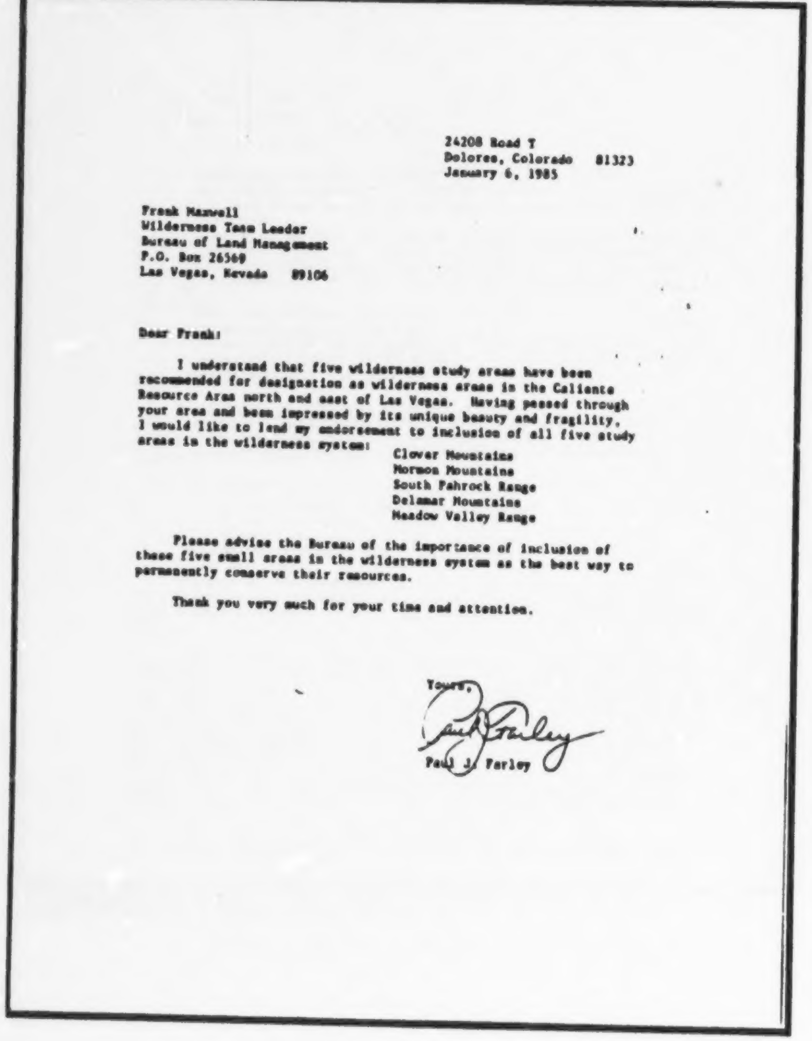
To be specific, my Sierra Club friends tell me that we should be working to set up the following acreages in these five WSA's:

Mormon Mountains	123,132	acres
Meadow Valley Range	166,500	"
Clover Mountains	80,000	"
Delamar Mountains	102,490	"
South Pahroch Range	28,395	"

As I learn about the natural beauty of these areas, I feel the urgency and the necessity to set up a proper amount of acreage in each area, so that the "systems" will stay intact,.... so that all of us will have opportunities to enjoy this for years to come. I urge your support of this..... respectfully,

John Evenson

COMMENT LETTER 66



24208 Road T
Dolores, Colorado 81323
January 6, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Frank:

I understand that five wilderness study areas have been recommended for designation as wilderness areas in the Caliente Resource Area north and east of Las Vegas. Having passed through your area and been impressed by its unique beauty and fragility, I would like to lend my endorsement to inclusion of all five study areas in the wilderness system:

Clover Mountains
Mormon Mountains
South Pahrock Range
Delamar Mountains
Meadow Valley Range

Please advise the Bureau of the importance of inclusion of these five small areas in the wilderness system as the best way to permanently conserve their resources.

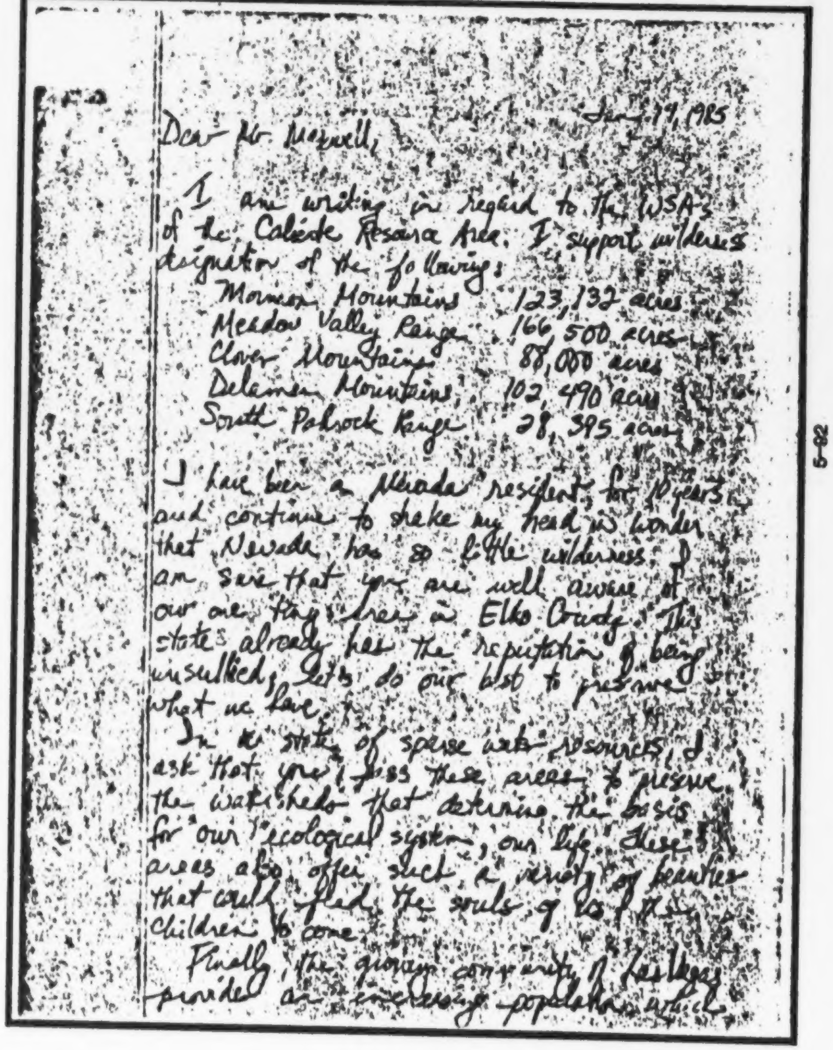
Thank you very much for your time and attention.

Yours,

Paul J. Farley

Paul J. Farley

COMMENT LETTER 67



Jan 19, 1985

Dear Mr. Maxwell,

I am writing in regard to the WSA's of the Caliente Resource Area. I support wilderness designation of the following:

Mormon Mountains 123,132 acres
Meadow Valley Range 166,500 acres
Clover Mountains 88,000 acres
Delamar Mountains 102,490 acres
South Pahrock Range 28,395 acres

I have been a Nevada resident for 10 years and continue to shake my head in wonder that Nevada has so little wilderness. I am sure that you are well aware of our one tiny area in Elko County. This state already has the reputation of being unsullied, let's do our best to preserve what we have.

In the state of sparse water resources, I ask that you pass these areas to preserve the watersheds that determine the basis for our ecological system, our life. These areas also offer such a variety of beauties that could feed the souls of us & the children to come.

Finally, the growing community of Las Vegas provides an increasing population which

COMMENT LETTER 67

[illegible] to use these areas. I ask that as wilderness these areas be protected from those unknowing or reckless who may harm [illegible] the land. That would be a waste. Please for our Nevada support these wilderness proposals.

Sincerely yours,
Ellen [illegible]

COMMENT LETTER 68

VIRLIS L. FISCHER
[illegible] VICTORY AVENUE
LAS VEGAS, NEVADA [illegible]

December 1, 1984

Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, NV 89126

Gentlemen:

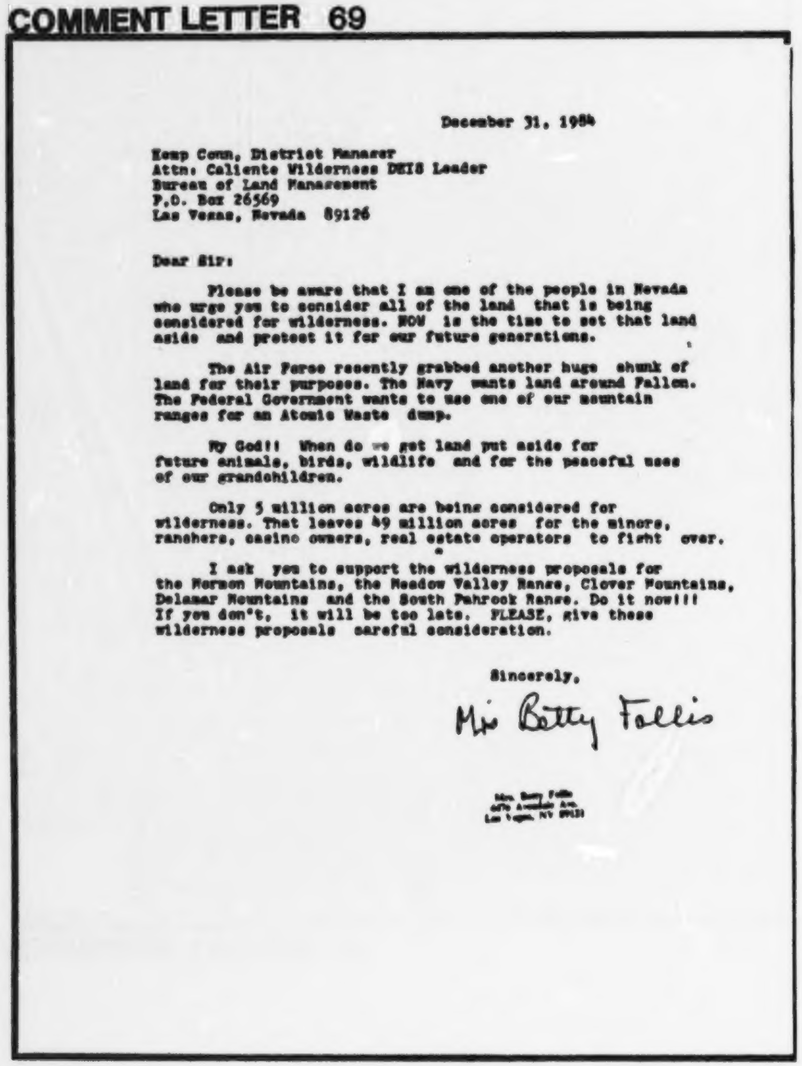
As a wilderness recreationist with broad experience throughout the West, miles and miles of sagebrush and pinyon-juniper is not my idea of wilderness -- at least not the kind that will stand on its merits against future pressures for other uses. I am a firm believer in multiple use management of the public lands, but will support wilderness designation for truly exceptional and worthy areas. Unfortunately, there aren't many in Nevada.

Of those recommended in your Draft Environmental Impact Statement, the only one that has some merit in my book is the South Pahroc range. But even this one is not sufficiently outstanding as to outweigh its potential under multiple use management for the greatest public good.

I think your team has done a good, conscientious job, however, and I appreciate this opportunity to comment.

Sincerely,
Virlis L. Fischer
Virlis L. Fischer

COMMENT LETTER 69



December 31, 1984

Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Sir:

Please be aware that I am one of the people in Nevada who urge you to consider all of the land that is being considered for wilderness. NOW is the time to set that land aside and protect it for our future generations.

The Air Force recently grabbed another huge chunk of land for their purposes. The Navy wants land around Fallon. The Federal Government wants to use one of our mountain ranges for an Atomic Waste dump.

My God!! When do we get land put aside for future animals, birds, wildlife and for the peaceful uses of our grandchildren.

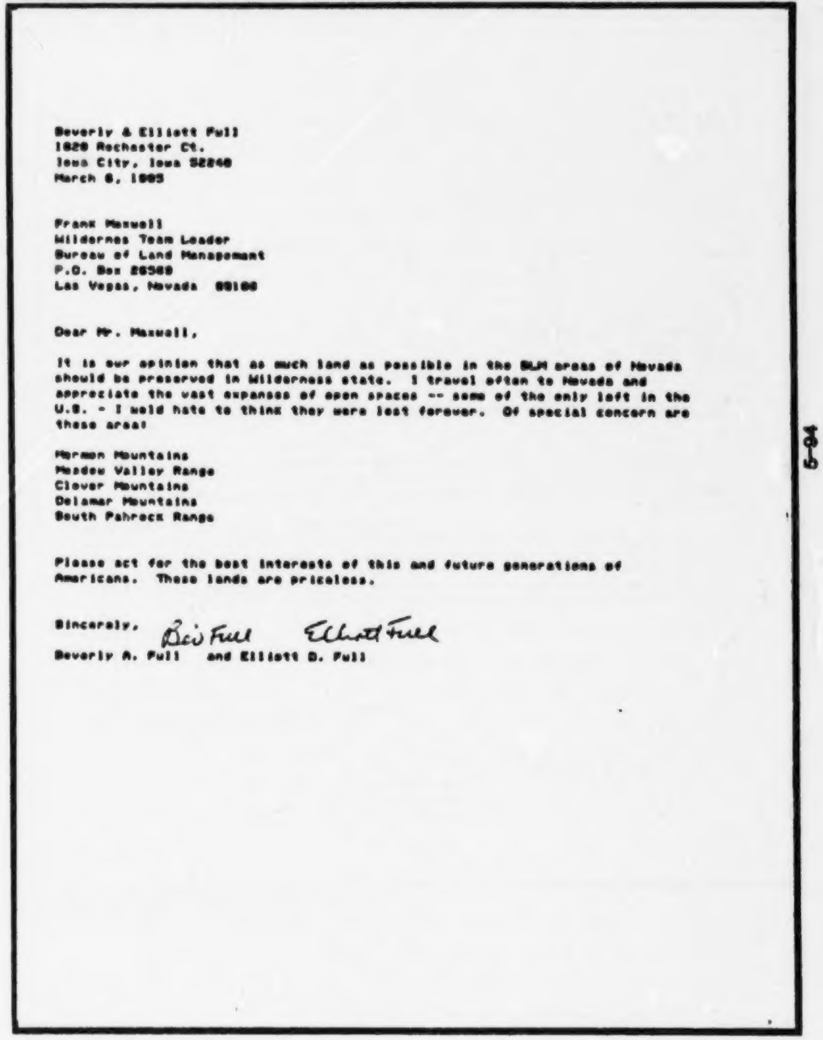
Only 5 million acres are being considered for wilderness. That leaves 49 million acres for the miners, ranchers, casino owners, real estate operators to fight over.

I ask you to support the wilderness proposals for the Mormon Mountains, the Meadow Valley Range, Clover Mountains, Delamar Mountains and the South Pahrock Range. Do it now!!! If you don't, it will be too late. PLEASE, give these wilderness proposals careful consideration.

Sincerely,

Mrs Betty Follis

COMMENT LETTER 70



Beverly & Elliott Full
1020 Rochester Ct.
Iowa City, Iowa 52240
March 8, 1985

Frank Maxwell
Wildernes Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

Dear Mr. Maxwell,

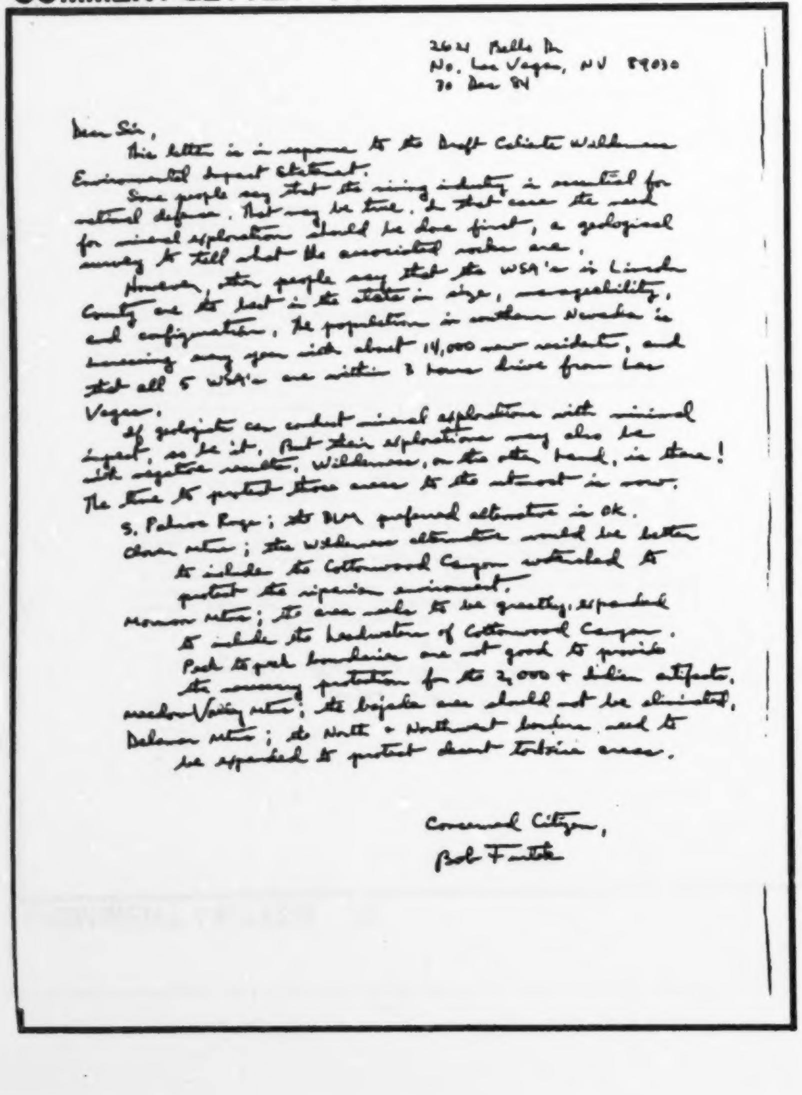
It is our opinion that as much land as possible in the BLM areas of Nevada should be preserved in Wilderness state. I travel often to Nevada and appreciate the vast expanses of open spaces -- some of the only left in the U.S. - I wold hate to think they were lost forever. Of special concern are these area!

Mormon Mountains
Meadow Valley Range
Clover Mountains
Delamar Mountains
South Pahrock Range

Please act for the best interests of this and future generations of Americans. These lands are priceless.

Sincerely, Bev Full Elliott Full
Beverly A. Full and Elliott D. Full

COMMENT LETTER 71



2621 Bello Dr
No. Las Vegas, NV 89030
30 Dec 84

Dear Sir,

This letter is in response to the Draft Caliente Wilderness Environmental Impact Statement.

Some people say that the mining industry is essential for national defense. That may be true. In that case the need for mineral exploration should be done first, a geological survey to tell what the associated values are.

However, other people say that the WSA's in Lincoln County are the best in the state in size, manageability, and configuration. The population in southern Nevada is increasing every year with about 14,000 new residents, and that all 5 WSA's are within 3 hours drive from Las Vegas.

If geologists can conduct mineral explorations with minimal impact, so be it. But their explorations may also be with negative results. Wilderness, on the other hand, is there! The time to protect these areas to the utmost is now.

S. Pahroc Range; the BLM preferred alternative is OK.

Clover Mtns; the Wilderness alternative would be better to include the Cottonwood Canyon watershed to protect the riparian environment.

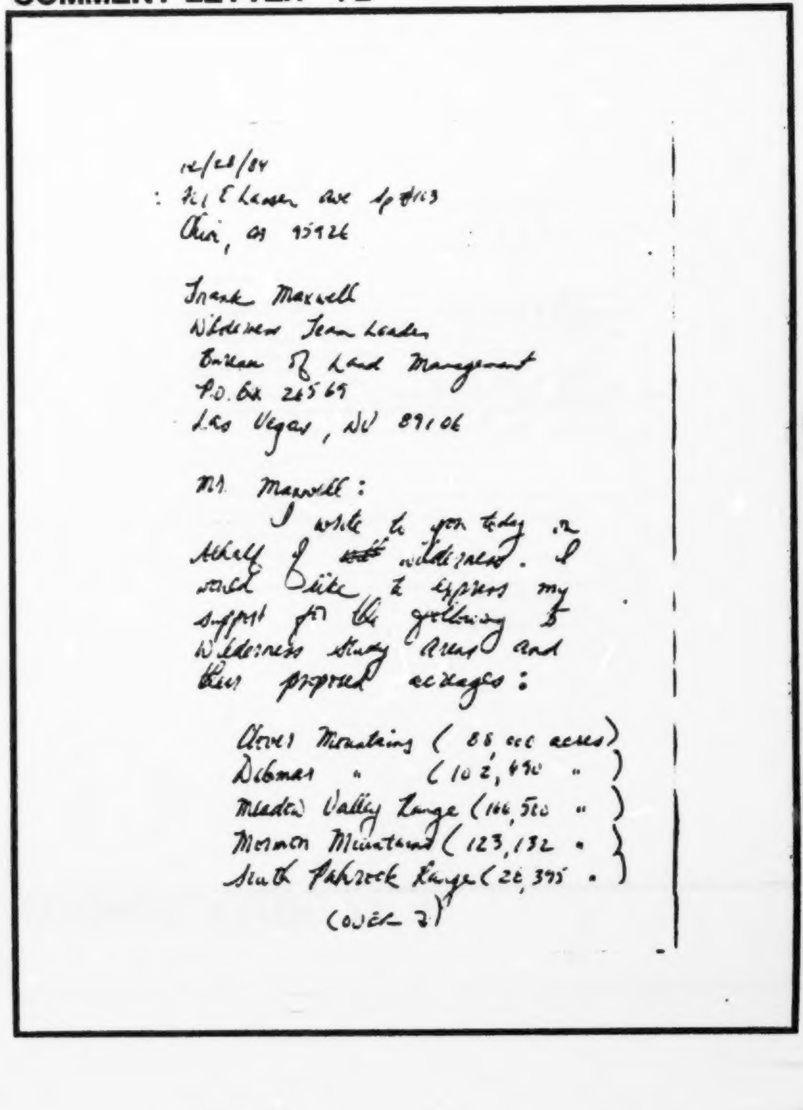
Mormon Mtns; the area needs to be greatly expanded to include the headwaters of Cottonwood Canyon. Peak to peak boundaries are not good to provide the necessary protection for the 2,000 + Indian artifacts.

Meadow Valley Mtns; the bajada area should not be eliminated.

Delamar Mtns; the North & Northwest boundaries need to be expanded to protect desert tortoise areas.

Concerned Citizen,
Bob Fante

COMMENT LETTER 72



12/28/84
: 761 E Lassen Ave Ap #113
Chico, CA 95926

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

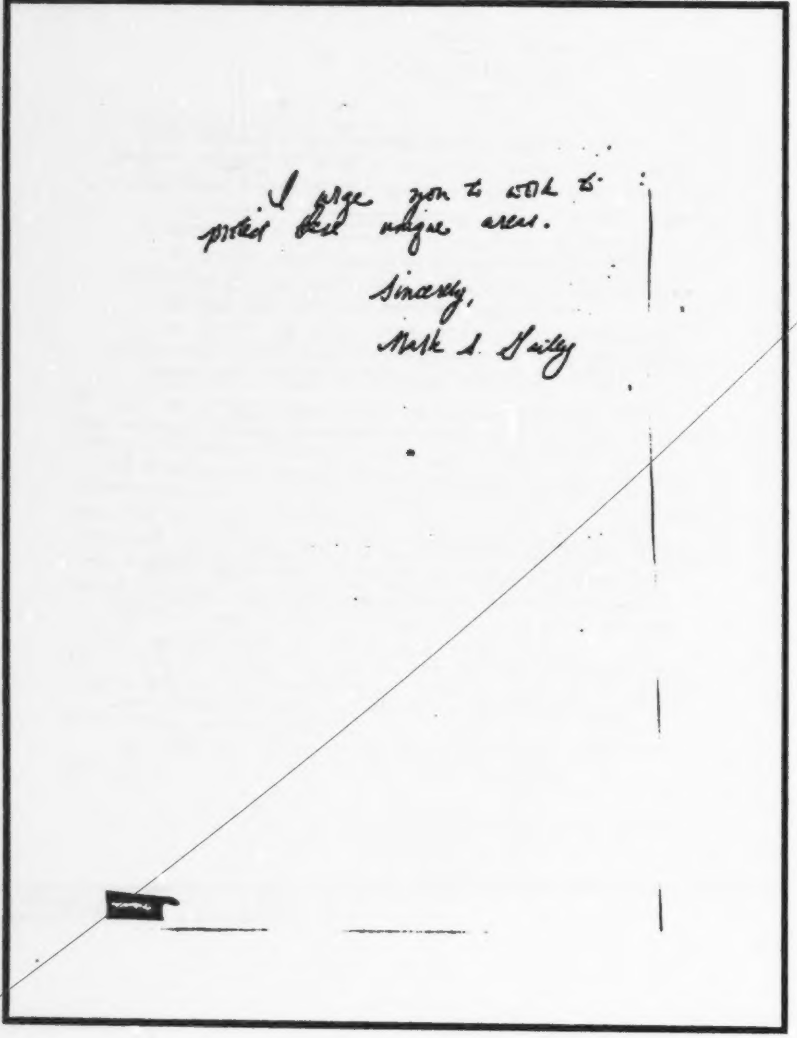
Mr. Maxwell:

I write to you today in behalf of ~~our~~ wilderness. I would like to express my support for the following 5 Wilderness Study Areas and their proposed acreages:

Clover Mountains (88,000 acres)
Delamar " (102,430 ")
Meadow Valley Range (166,500 ")
Mormon Mountains (123,132 ")
South Pahroc Range (26,395 ")

(over →)

COMMENT LETTER 72

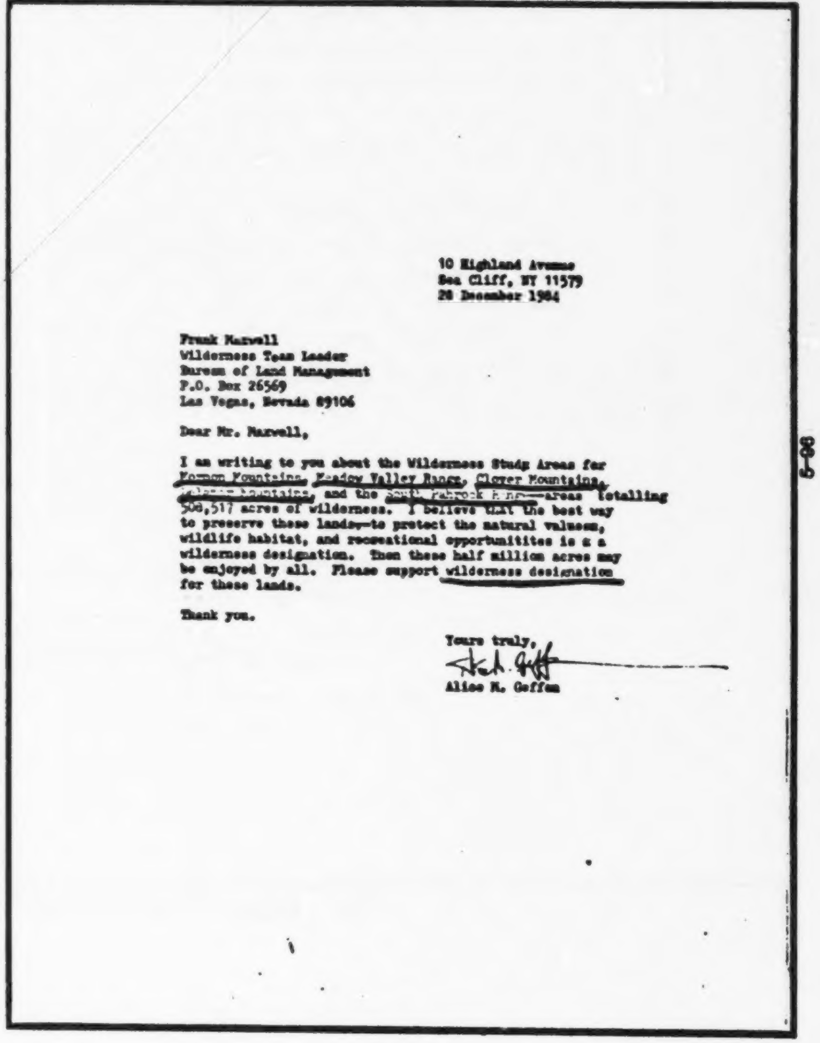


I urge you to work to protect these unique areas.

Sincerely,

Mark S. Bailey

COMMENT LETTER 73



10 Highland Avenue
Sea Cliff, NY 11579
28 December 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell,

I am writing to you about the Wilderness Study Areas for Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and the South Pahroc Range—areas totalling 508,517 acres of wilderness. I believe that the best way to preserve these lands—to protect the natural values, wildlife habitat, and recreational opportunitites is a a wilderness designation. Then these half million acres may be enjoyed by all. Please support wilderness designation for these lands.

Thank you.

Yours truly,

Alice M. Goffman

COMMENT LETTER 74

December 23, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26469
Las Vegas, NV 89106

Dear Mr. Maxwell:

It is my understanding that the Bureau of Land Management will, in the near future, submit recommendations to Congress concerning five potential Wilderness Area's in the Caliente Resource Area of Lincoln County, Nevada.

I wish to add my voice in support of the proposals by the Sierra Club and urge that the following area's be designated as Wilderness Areas' and be forever protected from all commercial developement:

Mormon Mountains — 123,132 acres
Meadow Valley Range — 166,500 acres
Clover Mountains — 88,000 acres
Delamar Mountains — 102,490 acres
South Pahroc Range — 28,395 acres

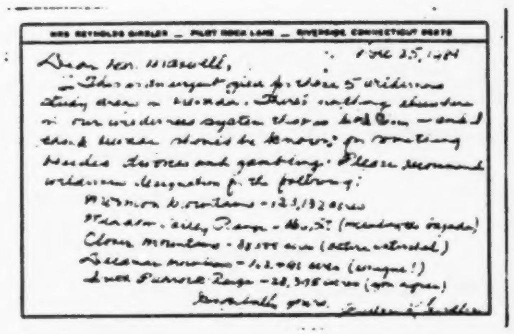
While I live in Northern Nevada, my occassional visits to these unique and beautiful areas of our state are very inspirational to me. I am sure the pressure to open these habitats to unrestricted developement is substantial, but I strongly urge that you recommend the preservation of these Wilderness areas. These delicate and sensitive areas are unique not only in Nevada, but in all of the United States. Please give these lands the strongest protection possible.

Sincerely,

Walter F. Gibble

Dr. Walter F. Gibble

COMMENT LETTER 75



MRS REYNOLDS GIRDLER — FLINT ROCK LANE — RIVERSIDE CONNECTICUT 06878

Dec 25, 1984

Dear Mr. Maxwell,

This is an urgent plea for those 5 wilderness study areas in Nevada. There's nothing elsewhere in our wilderness system that is like them — and I think Nevada should be known for something besides divorces and gambling. Please recommend wilderness designation for the following:

Mormon Mountains – 123,132 acres
Meadow Valley Range – 166,5?? ([illegible])
Clover Mountains – 88,000 acres ([illegible])
Delamar Mountains – 102,490 acres (unique!)
South Pahroc Range – 28,395 acres ([illegible])

Gratefully yours, [illegible]

COMMENT LETTER 76

R. William Glaser, Ph.D.
126 Buttercup Lane
Huntington, L.I., N.Y. 11743

12/24/84

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell,

I am writing asking you to recommend Wilderness Study Areas in Nevada as follows;

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahroc Range - 28,395 acres.

Although my wife and I live in the East we have a vacation home in So. Lake Tahoe, Calif., Eldorado County and spend much time in Nevada. We hope you will include all the above acreage in your recommendations.

Very truly yours,
R. William Glaser

COMMENT LETTER 77

50 E. Oakland
Columbus, Ohio 43201
12-21-84

Mr. Maxwell:

I am writing to encourage you to designate the following areas in Nevada as "wilderness:"

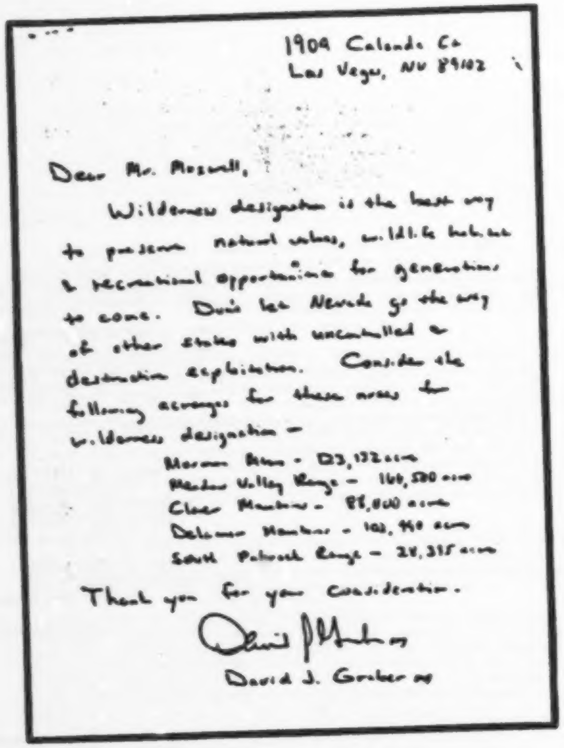
Mormon MTS: 123,02 acres
Meadow Valley Range: 166,500 acres
Clover MTS: 88,000 acres
Delamar MTS: 102,490 acres
S. Pahroc Range: 28,395 acres.

Wilderness designation is the best way to protect the natural values, wildlife habitat, + recreational opportunities in these areas.

Thanks for your consideration.

Sincerely,
Ron P. Good

COMMENT LETTER 78



1909 Calavada Ct
Las Vegas, NV 89102

Dear Mr. Roswell,

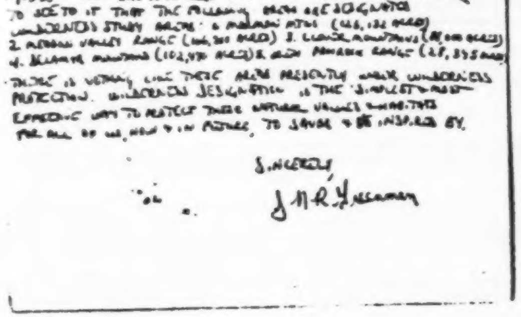
Wilderness designation is the best way to preserve natural values, wildlife habitat & recreational opportunities for generations to come. Don't let Nevada go the way of other states with uncontrolled & destructive exploitation. Consider the following acreages for these areas for wilderness designation –

Mormon Mtns – 123,132 acres
Meadow Valley Range – 160,500 acres
Clover Mountains – 85,000 acres
Delamar Mountains – 102,440 acres
South Pahroc Range – 28,375 acres

Thank you for your consideration.

David J. Gruber

COMMENT LETTER 79

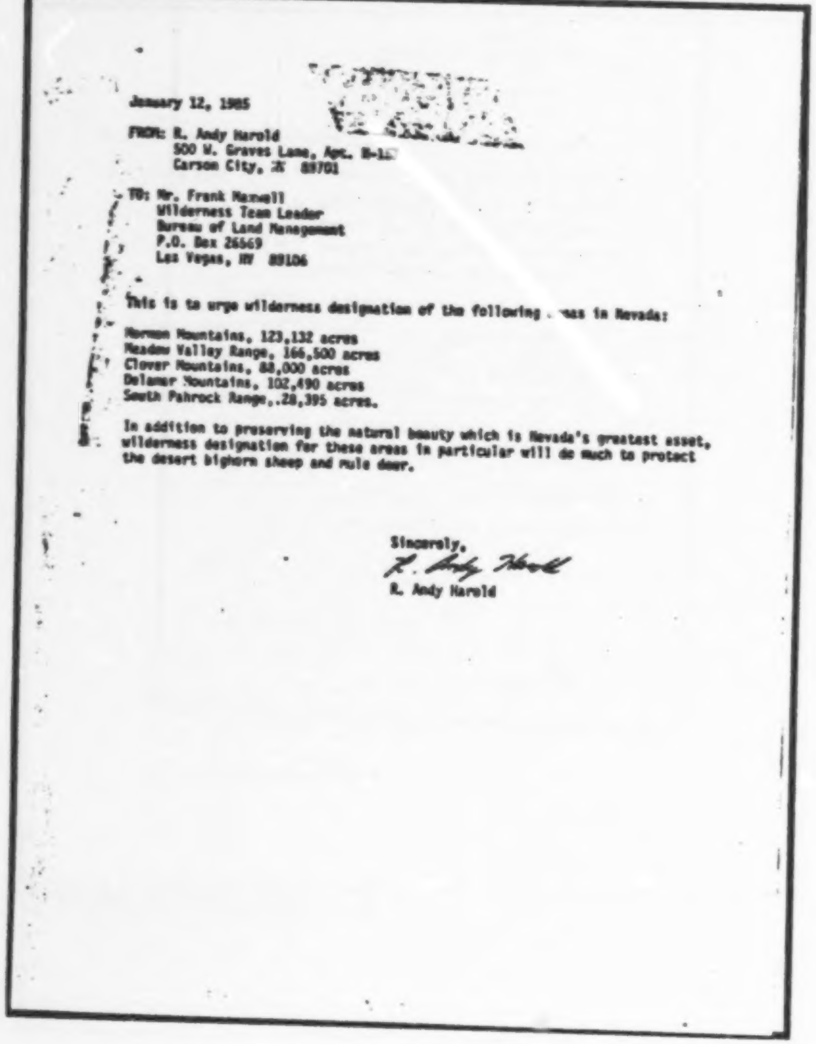


1-5-85 — SIR – THIS IS TO URGE YOU TO DO ALL IN YOUR POWER TO SEE TO IT THAT THE FOLLOWING AREAS ARE DESIGNATED WILDERNESS STUDY AREAS: 1. MORMON MTNS (123,132 ACRES) 2. MEADOW VALLEY RANGE (160,500 ACRES) 3. CLOVER MOUNTAINS (85,000 ACRES) 4. DELAMAR MOUNTAINS (102,440 ACRES) 5. SOUTH PAHROC RANGE (28,375 ACRES)

THERE IS NOTHING LIKE THESE AREAS PRESENTLY UNDER WILDERNESS PROTECTION. WILDERNESS DESIGNATION IS THE SIMPLEST & MOST EFFECTIVE WAY TO PROTECT THESE NATURAL VALUES & HABITATS FOR ALL OF US, NOW & IN FUTURE, TO SAVOR & BE INSPIRED BY.

SINCERELY,

COMMENT LETTER 80



January 12, 1985

FROM: R. Andy Harold
500 W. Graves Lane, Apt. B-1
Carson City, NV 89701

TO: Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

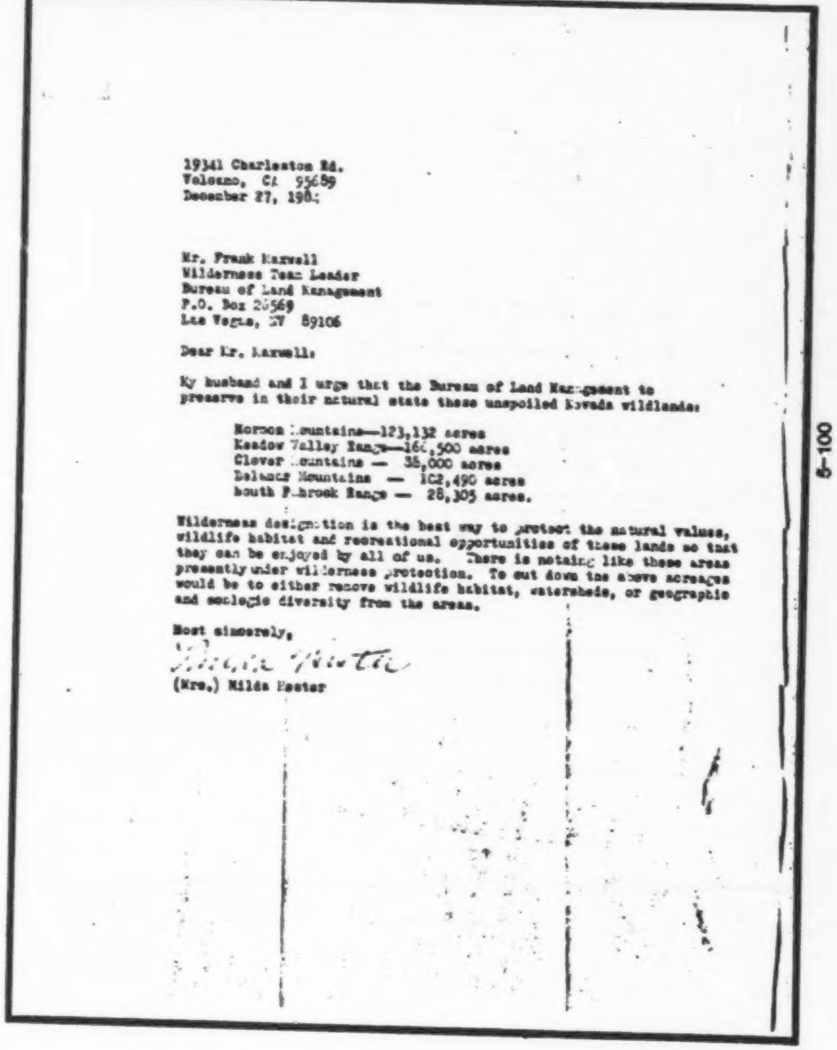
This is to urge wilderness designation of the following areas in Nevada:

Mormon Mountains, 123,132 acres
Meadow Valley Range, 166,500 acres
Clover Mountains, 88,000 acres
Delamar Mountains, 102,490 acres
South Pahrock Range,.28,395 acres.

In addition to preserving the natural beauty which is Nevada's greatest asset, wilderness designation for these areas in particular will do much to protect the desert bighorn sheep and mule deer.

Sincerely,
R. Andy Harold
R. Andy Harold

COMMENT LETTER 81



19341 Charleston Rd.
Volcano, CA 95689
December 27, 1984

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

My husband and I urge that the Bureau of Land Management to preserve in their natural state these unspoiled Nevada wildlands:

Mormon Mountains—123,132 acres
Meadow Valley Range—166,500 acres
Clover Mountains — 85,000 acres
Delamar Mountains — 102,490 acres
South Pahrock Range — 28,305 acres.

Wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so that they can be enjoyed by all of us. There is nothing like these areas presently under wilderness protection. To cut down the above acreages would be to either remove wildlife habitat, watersheds, or geographic and ecologic diversity from the areas.

Most sincerely,

(Mrs.) Hilda Hester

COMMENT LETTER 82

506 SW 40th Terrace
Gainesville, Florida 32607
December 31, 1984

Re: Caliente Resource Area WSAs

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

Human desire for profit apparently is insatiable. Unfortunately, much of the development promoted pursuant to such desire cuts against basic American values. Wildlife habitat and places of unique beauty and scientific interest, once degraded or destroyed, rarely can be restored. Such areas make up only a small portion of the hundreds of millions of acres BLM is charged with administering. If these areas are not protected now, they and the wildlife they sustain, and their importance for knowledge and enjoyment will be lost forever.

We are particularly concerned that certain valuable and still unspoiled WSAs in the Caliente Resource Area in Nevada will not be preserved under the BLM's current draft recommendations: Clover Mountains, Delamar Mountains, the Meadow Valley Range, and Mormon Mountains. Together with the South Pahroc Range, these WSAs contain remarkable geological and ecologic characteristics.

Numerous wildlife species abound in these WSAs. If identified and defined for preservation with sufficient care and acreage, these WSAs will provide enough habitat for these wildlife species for decades and centuries to come. Such self-sustaining habitats are essential for scientific research on species behaviour and survival patterns—all of which may be relevant to developing better human survival strategies. To be self-sustaining, however, requires an integral eco-system with sufficient land area and distancing from future development. Several of these areas also contain unique archeological and geological sites, and all of them have high potential for limited recreational use appropriate to preserved wilderness.

What is at issue here is only a fraction of the nearly fifty million acres of Nevada lands under BLM jurisdiction. We owe it to ourselves and to America's future to see to it that such significant natural areas are preserved for their highest and best use: as wilderness.

Therefore, we strongly urge your adoption of the more conservative wilderness designations in the conservationists' proposal: the 88 thousand acres recommended for Clover Mountains, the 102,490 acres recommended for Delamar Mountains, the 166,900 acres recommended for the Meadow Valley Range, and the 123,132 acres recommended for Mormon Mountains, along with the mutually agreed to designation for the South Pahroc Range.

Most respectfully,

Richard E. Ehers and family

COMMENT LETTER 83

841 Candace Dr.
Memphis, TN 38116-7014
January 2, 1985

Mr. Frank Marwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Marwell:

Re: Wilderness Study Recommendations for five areas in the Caliente Resources Area.

The Bureau is urged to recommend wilderness designation for the five areas described below.

Mormon Mountains - Recommending 123,132 acres for wilderness would protect crucial habitat for desert tortoise, quail, mule deer and desert bighorn and eliminate potential management problems.

Meadow Valley Range - Recommending 166,900 acres would protect desert bighorn, who make their home in these mountains and would add geographic and ecologic diversity by including the huge bajada.

Clover Mountains - Recommending 88,000 acres would include the entire Cottonwood Canyon watershed.

Delamar Mountains - Recommending 102,490 acres would protect the habitat for mule deer and bighorn sheep.

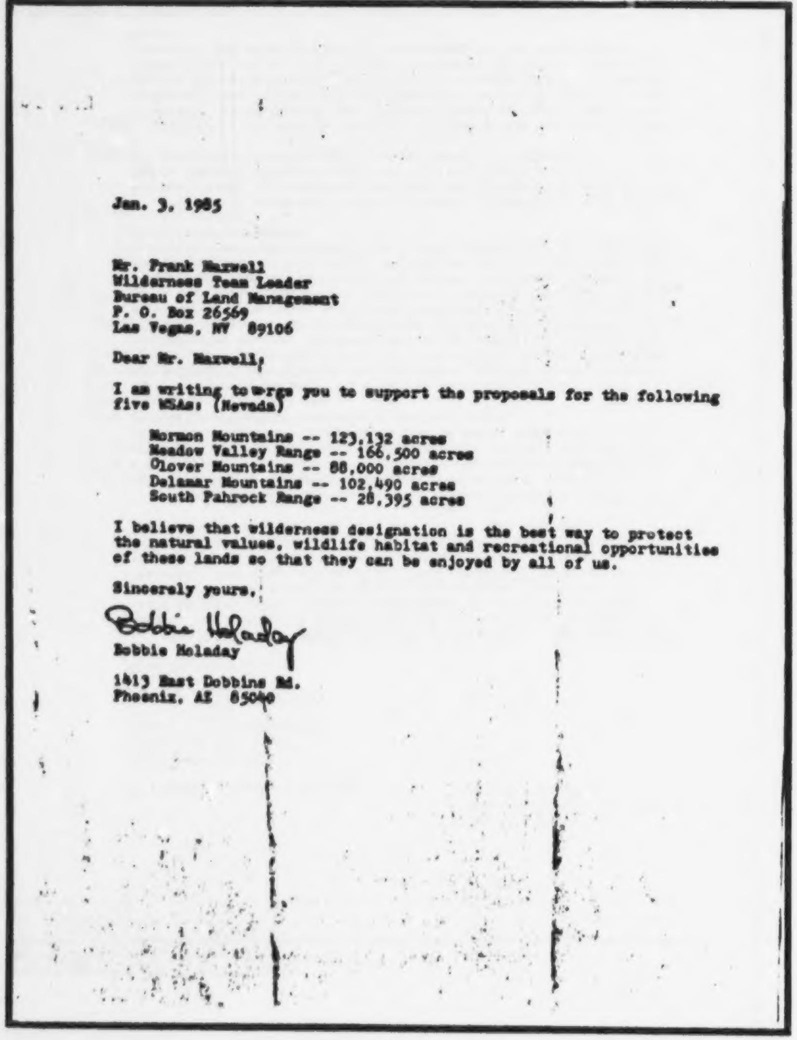
South Pahrock Range - Recommending 23,395 acres would protect the relic stands of dwarf white fir which cap the summit as well as the uncommonly large and graceful pinyon pines found in the western canyons.

Wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these acres for enjoyment by all persons.

Sincerely,

Jesse L. Himmelreich
Jesse L. Himmelreich

COMMENT LETTER 84



Jan. 3, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell;

I am writing to urge you to support the proposals for the following five WSAs: (Nevada)

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 88,000 acres
Delamar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

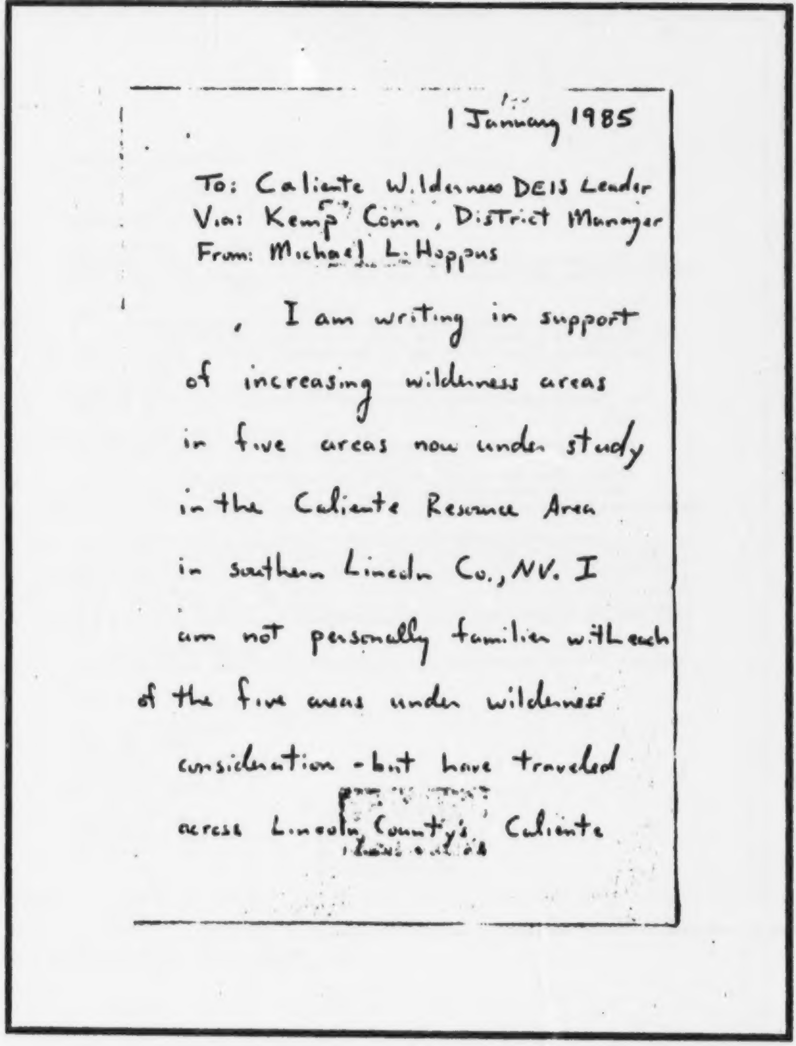
I believe that wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so that they can be enjoyed by all of us.

Sincerely yours,

Bobbie Holaday
Bobbie Holaday

1413 East Dobbins Rd.
Phoenix, AZ 85040

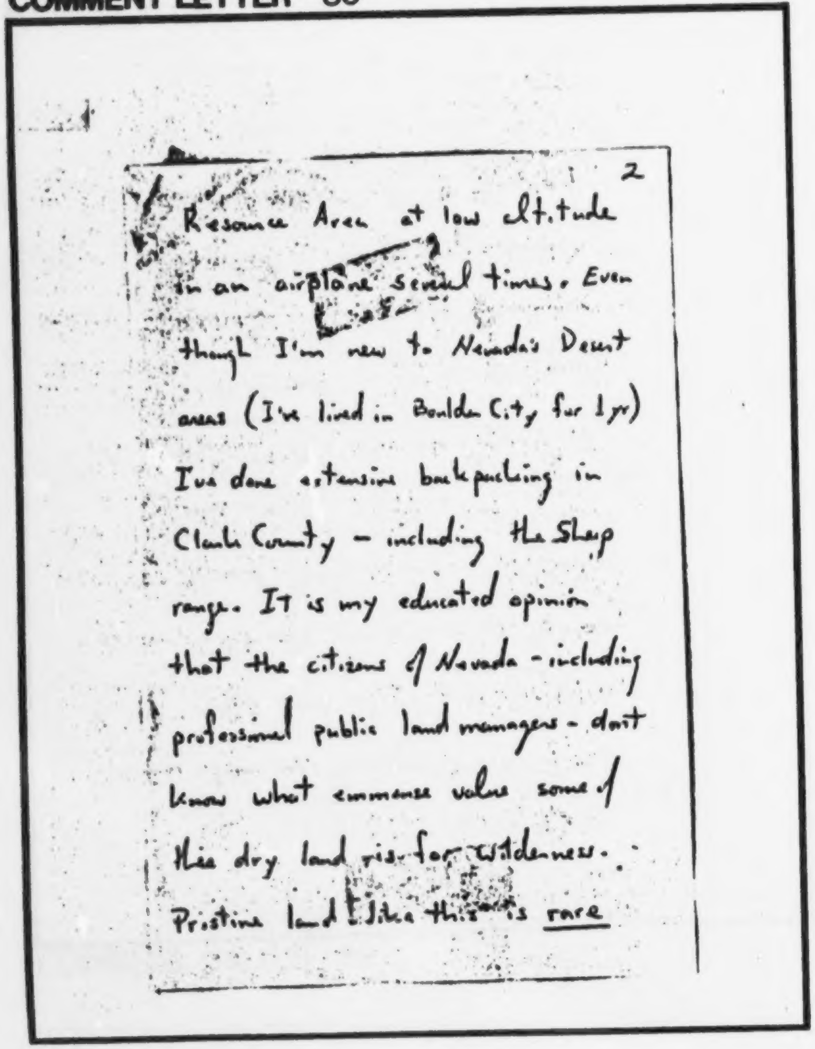
COMMENT LETTER 85



1 January 1985

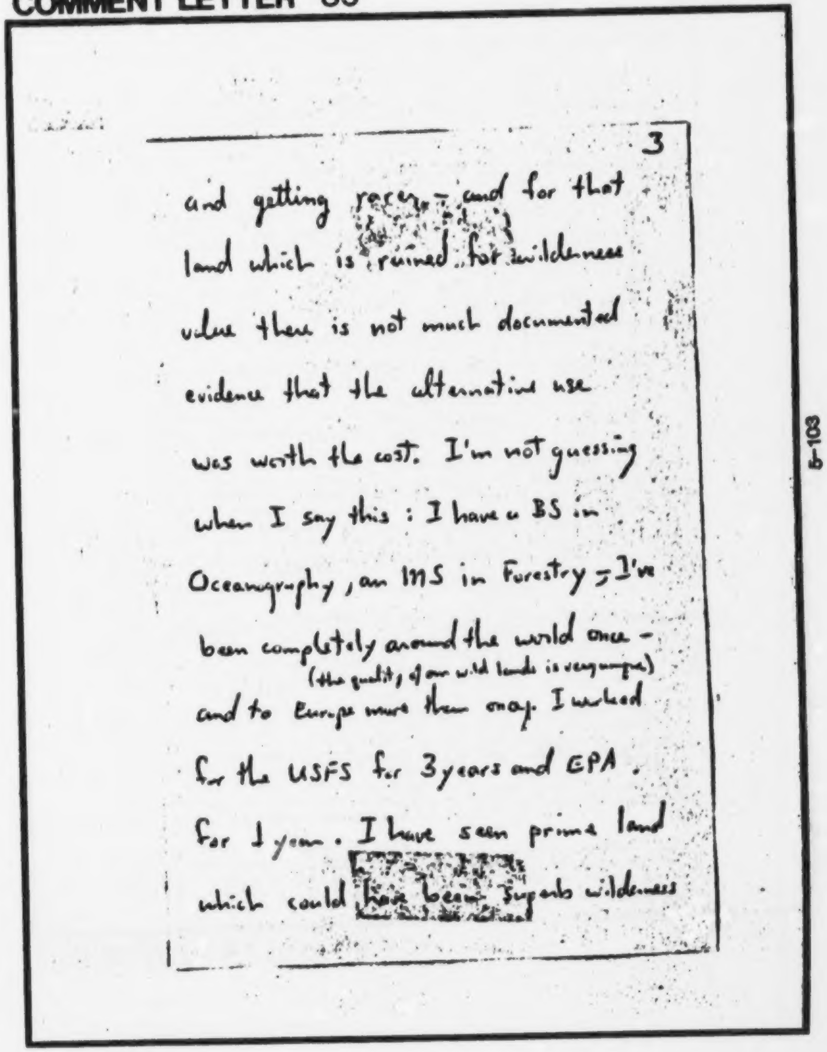
To: Caliente Wilderness DEIS Leader
Via: Kemp Conn, District Manager
From: Michael L. Hoppus

, I am writing in support of increasing wilderness areas in five areas now under study in the Caliente Resource Area in southern Lincoln Co., NV. I am not personally familiar with each of the five areas under wilderness consideration - but have traveled across Lincoln County's Caliente



2

Resource Area at low altitude in an airplane several times. Even though I'm new to Nevada's Desert areas (I've lived in Boulder City for 1 yr) I've done extensive backpacking in Clark County – including the Sheep range. It is my educated opinion that the citizens of Nevada – including professional public land managers – don't know what emmense value some of this dry land is for wilderness. Pristine land like this is rare



3

and getting rarer – and for that land which is ruined for wilderness value there is not much documented evidence that the alternative use was worth the cost. I'm not guessing when I say this: I have a BS in Oceanography, an MS in Forestry – I've been completely around the world once – (the quality of our wild lands is very unique) and to Europe more than once. I worked for the USFS for 3 years and EPA for 1 year. I have seen prime land which could have been superb wilderness

4

destroyed for an alternative use which could not be justified by pure and simple economics – let alone on terms of wildlife conservation, wilderness experience, etc.

This is why your objective method used in assessing the impact of wilderness on minerals is so important. This is real management and I fully support this method.

Below is a table of what acreages I support for wilderness

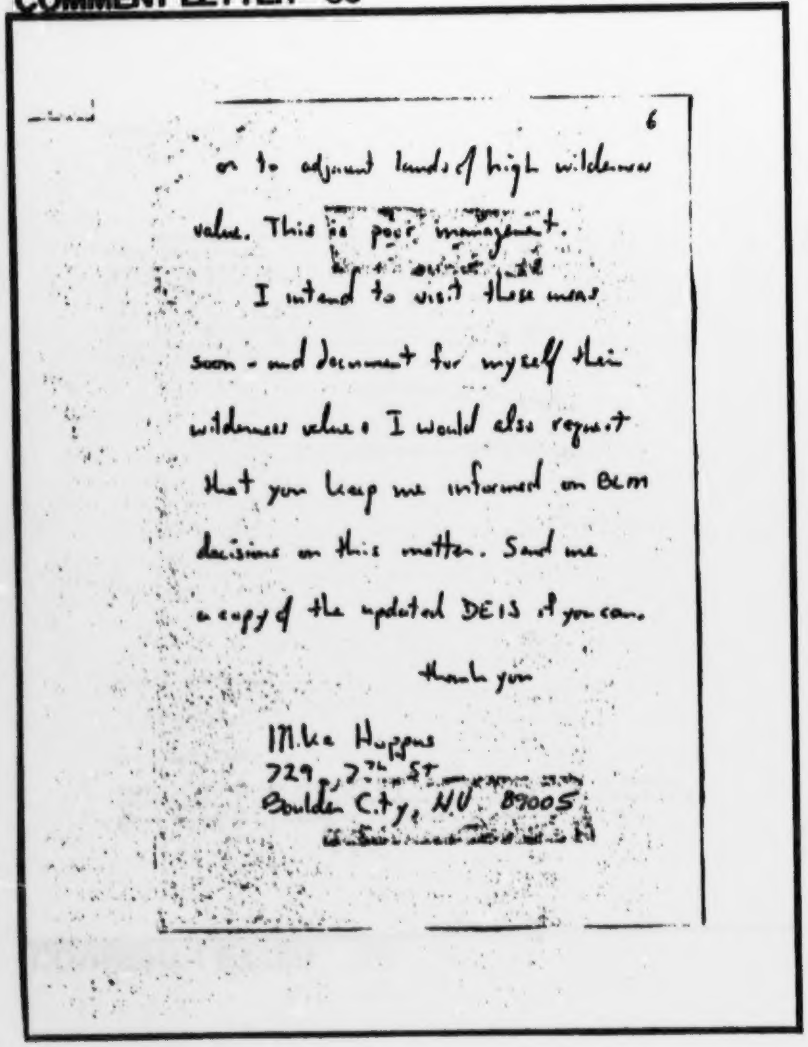
5.

compared with the BLM's Preferred choice:

	I support	BLM
Mormon Mts	124,000	23,690 *
Meadow Valley Range	167,000	97,180
Clover Mts	88,000	≈ 88,000
Delamar Mts	103,000	0 !
South Pahroc Range	29,000	29,000

* In the case of the Mormon Mts, especially, – the BLM preferred Alt is not well thought out. I understand the boundaries are arbitrarily drawn with no consideration given to topography

COMMENT LETTER 85



6

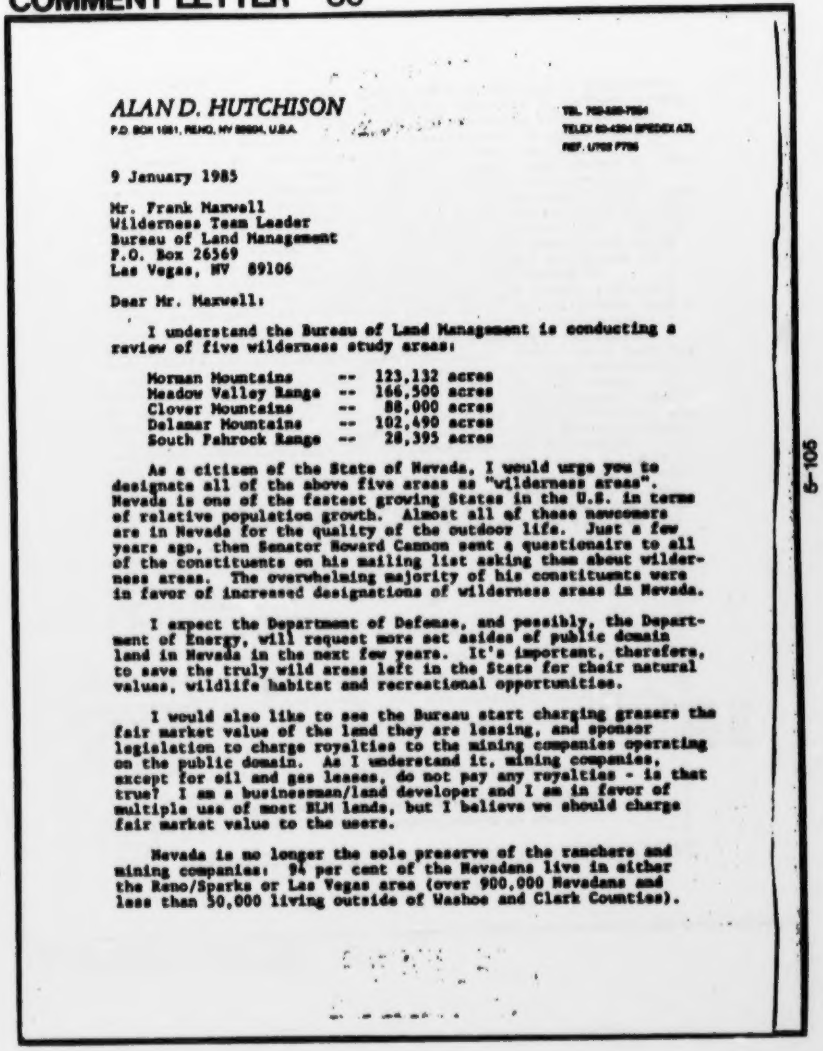
on to adjacent lands of high wilderness value. This is poor management.

I intend to visit these areas soon - and document for myself their wilderness value. I would also request that you keep me informed on BLM decisions on this matter. Send me a copy of the updated DEIS if you can.

thank you

Mike Huggins
729 7th St
Boulder City, NV 89005

COMMENT LETTER 86



ALAN D. HUTCHISON
P.O. BOX [illegible], RENO, NV [illegible], U.S.A.

TEL. [illegible]
TELEX [illegible]
REF. [illegible]

9 January 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

I understand the Bureau of Land Management is conducting a review of five wilderness study areas:

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 88,000 acres
Delamar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

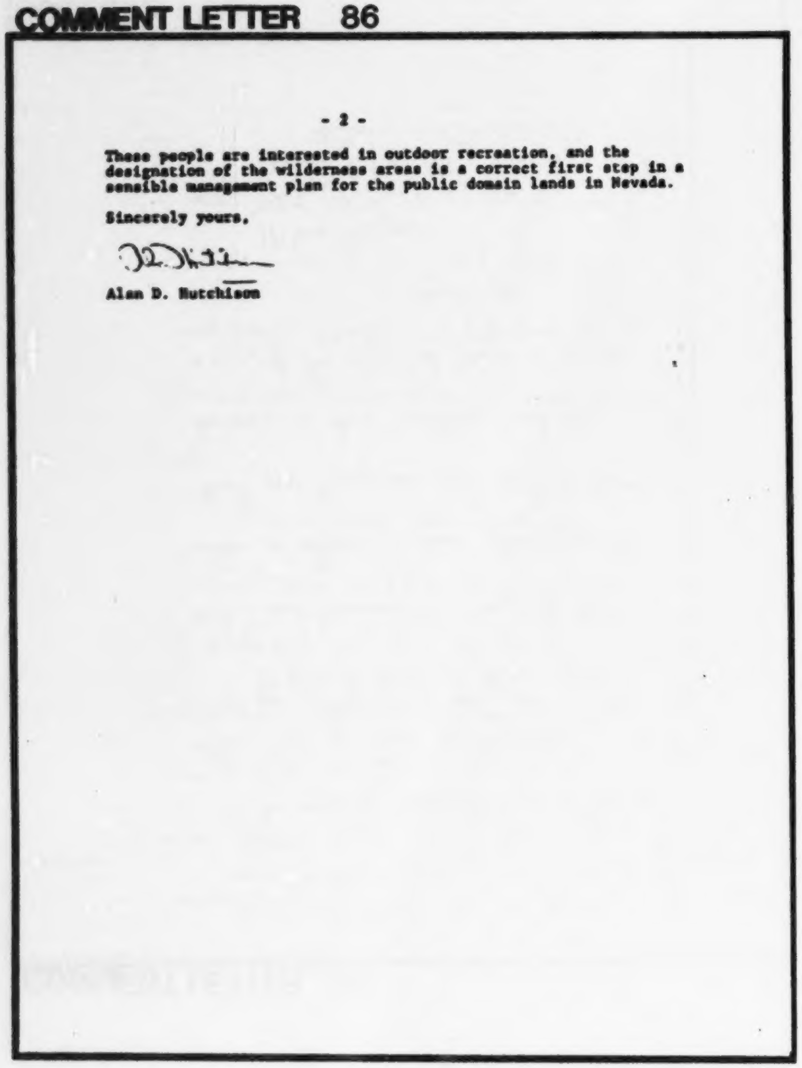
As a citizen of the State of Nevada, I would urge you to designate all of the above five areas as "wilderness areas". Nevada is one of the fastest growing States in the U.S. in terms of relative population growth. Almost all of these newcomers are in Nevada for the quality of the outdoor life. Just a few years ago, then Senator Howard Cannon sent a questionaire to all of the constituents on his mailing list asking them about wilderness areas. The overwhelming majority of his constituents were in favor of increased designations of wilderness areas in Nevada.

I expect the Department of Defense, and possibly, the Department of Energy, will request more set asides of public domain land in Nevada in the next few years. It's important, therefore, to save the truly wild areas left in the State for their natural values, wildlife habitat and recreational opportunities.

I would also like to see the Bureau start charging grazers the fair market value of the land they are leasing, and sponsor legislation to charge royalties to the mining companies operating on the public domain. As I understand it, mining companies, except for oil and gas leases, do not pay any royalties - is that true? I am a businessman/land developer and I am in favor of multiple use of most BLM lands, but I believe we should charge fair market value to the users.

Nevada is no longer the sole preserve of the ranchers and mining companies: 94 per cent of the Nevadans live in either the Reno/Sparks or Las Vegas area (over 900,000 Nevadans and less than 50,000 living outside of Washoe and Clark Counties).

COMMENT LETTER 86



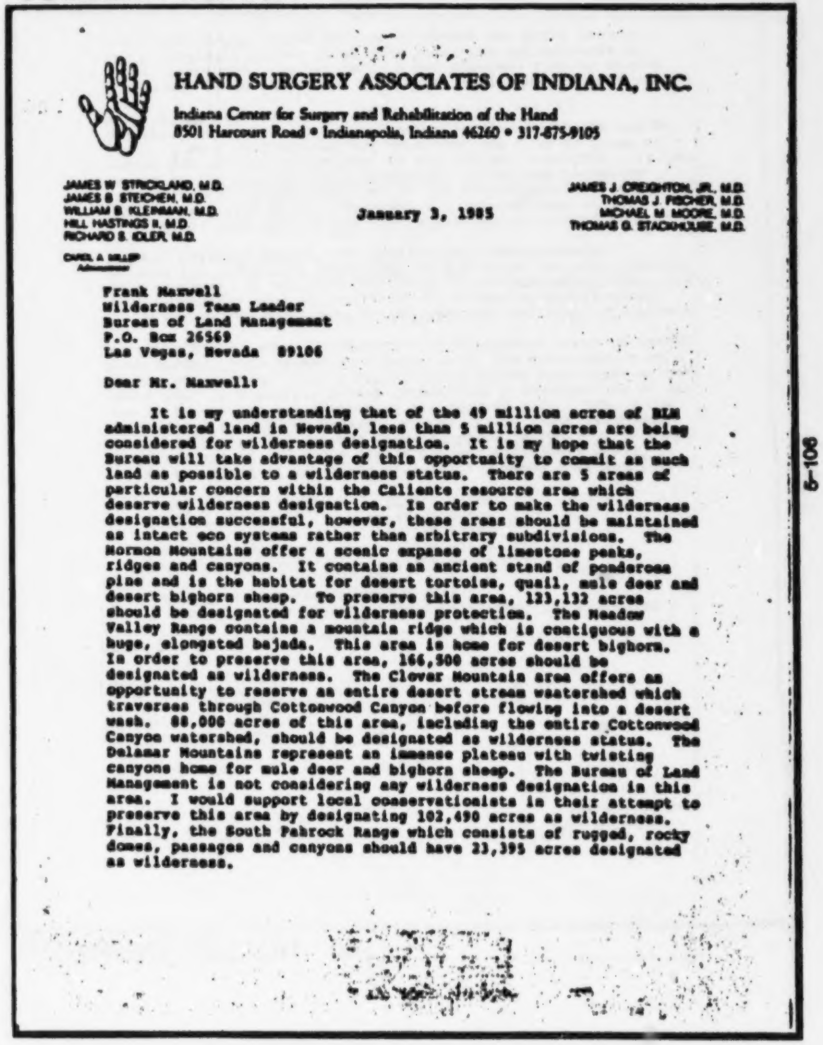
- 2 -

These people are interested in outdoor recreation, and the designation of the wilderness areas is a correct first step in a sensible management plan for the public domain lands in Nevada.

Sincerely yours,

Alan D. Hutchison

COMMENT LETTER 87



HAND SURGERY ASSOCIATES OF INDIANA, INC.
Indiana Center for Surgery and Rehabilitation of the Hand
8501 Harcourt Road • Indianapolis, Indiana 46260 • 317-875-9105

JAMES W. STRICKLAND, M.D.
JAMES B. STEICHEN, M.D.
WILLIAM B. KLEINMAN, M.D.
HILL HASTINGS II, M.D.
RICHARD S. IDLER, M.D.

JAMES J. CREIGHTON, JR., M.D.
THOMAS J. FISCHER, M.D.
MICHAEL M. MOORE, M.D.
THOMAS G. STACKHOUSE, M.D.

CAROL A. MILLER
Administrator

January 3, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

It is my understanding that of the 49 million acres of BLM administered land in Nevada, less than 5 million acres are being considered for wilderness designation. It is my hope that the Bureau will take advantage of this opportunity to commit as much land as possible to a wilderness status. There are 5 areas of particular concern within the Caliente resource area which deserve wilderness designation. In order to make the wilderness designation successful, however, these areas should be maintained as intact eco systems rather than arbitrary subdivisions. The Mormon Mountains offer a scenic expanse of limestone peaks, ridges and canyons. It contains an ancient stand of ponderosa pine and is the habitat for desert tortoise, quail, mule deer and desert bighorn sheep. To preserve this area, 123,132 acres should be designated for wilderness protection. The Meadow Valley Range contains a mountain ridge which is contiguous with a huge, elongated bajada. This area is home for desert bighorn. In order to preserve this area, 166,500 acres should be designated as wilderness. The Clover Mountain area offers an opportunity to reserve an entire desert stream watershed which traverses through Cottonwood Canyon before flowing into a desert wash. 88,000 acres of this area, including the entire Cottonwood Canyon watershed, should be designated as wilderness status. The Delamar Mountains represent an immense plateau with twisting canyons home for mule deer and bighorn sheep. The Bureau of Land Management is not considering any wilderness designation in this area. I would support local conservationists in their attempt to preserve this area by designating 102,490 acres as wilderness. Finally, the South Pahrock Range which consists of rugged, rocky domes, passages and canyons should have 23,395 acres designated as wilderness.

COMMENT LETTER 87

Frank Maxwell
January 3, 1985
Page 2

These areas represent unique desert eco spheres which are worth preserving in their entirety to protect their natural beauty, wildlife and yet permit visitations by man without irreversible damage to their delicate environment. Wilderness areas lost to development can never be reclaimed. I hope the Bureau of Land Management will take great care in making their decisions about the future of these lands and take the opportunity to preserve the natural beauty of these areas for our future generations.

Sincerely,

Richard S. Idler, M.D.

COMMENT LETTER 88

12/23/84

[illegible]
[illegible]
CARSON CITY, NEVADA [illegible]

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas NV 89106

Dear Mr. Maxwell,

I appreciate the opportunity to comment on the BLM's draft wilderness recommendations for the Caliente Resource Area in Lincoln County, Nevada.

Like many other Nevadans, I support wilderness recommendations that consider the needs of the present and future citizens of Nevada. We are lucky in Nevada to have many unspoiled, natural, and environmentally significant areas. These areas will become the endangered species of the 21st century if we do not act now.

COMMENT LETTER 88

Therefore, I support the wilderness proposals for the Caliente Resource Area including the following: Clover Mountains 88,000 acres; Delamar Mountains 102,490 acres; Meadow Valley Range 166,500 acres; Mormon Mountains 123,132 acres; and South Pahrock Range 28,395 acres.

Wilderness designation is the best way to protect the natural values, wildlife and recreational opportunities of these lands so that they can be enjoyed by future generations.

Thank you for considering my point of view.

Sincerely,

Abby Johnson

COMMENT LETTER 89

Norman Johnson
315 W. 3rd St, #509
Long Beach, CA 90802

December 22, 1984

Frank Maxwell, Esq.
BLM, Box 26569
Las Vegas, Nevada 89106

Dear Max,

I know your BLM lands in Nevada, and it is my fervent prayer that the five WSAs in the Caliente Area will be given Wilderness protection, for their natural values, as pristine wildlands, wildlife habitat, and ecological importance.

Once lost to development there is virtually no hope of recovery. Only in Wilderness designation is there hope, and in this my hope is in you.

So it is that I would have you recommend the following acreages for preservation as Wilderness:-

Meadow Valley -- to 167,000 acres
Delmar Mts -- to 103,000 acres
Mormon Mts -- to 124,000 acres
So. Pahrock -- to 28,500 acres
Clover Mts -- to 90,000 acres.

Let us hope that in the New Year our National Lands will be more cherished than in the recent past. You and your staff have my good wishes.

Concerned citizen,

COMMENT LETTER 90

8230 Mohawk Lane
Reno, NV 89506
December 24, 1984

Frank Maxwell
Wilderness Team Leader
BLM, P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

I am a strong supporter of increasing the amount of wilderness designated lands in our beautiful state. It is the only way to preserve the fragile lands and wildlife habitats that they support.

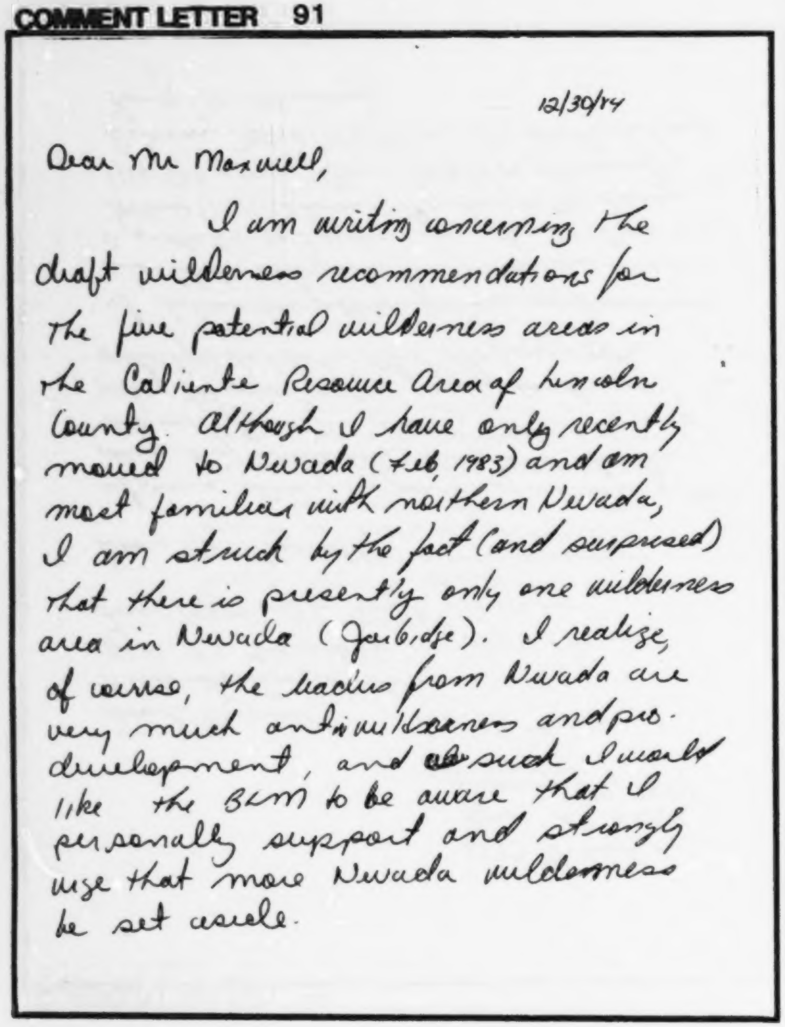
I believe the following areas and acreages should be designated as wilderness areas & protected for future generations: Mormon Mtns (123,132 acres); Meadow Valley Range (166,500 acres); Clover Mtns (88,000 acres); Delamar Mtns (102,490 acres); South Pahrock Range (28,395 acres).

COMMENT LETTER 90

Please do not allow development and eventual spoiling of these precious resources. Let us protect and preserve them and keep a part of the Nevada wildlands unspoiled.

Thank you very much for your help and consideration on these very crucial decisions.

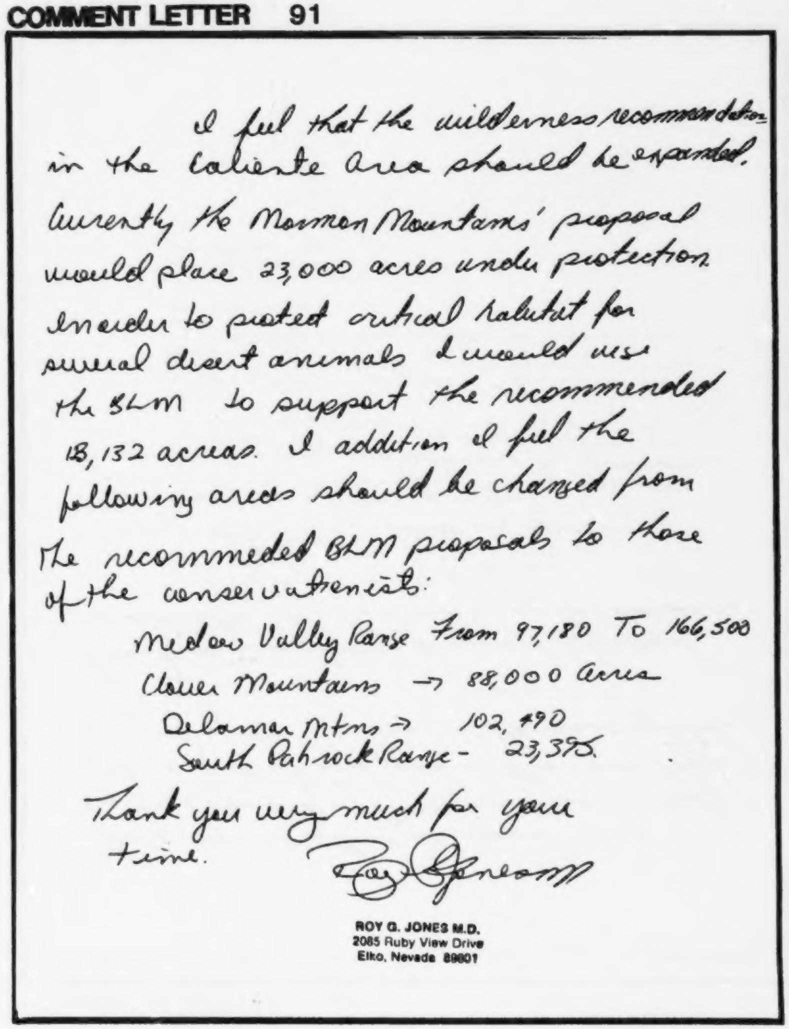
Sincerely yours,
Patricia A. Johnson



12/30/84

Dear Mr Maxwell,

I am writing concerning the draft wilderness recommendations for the five potential wilderness areas in the Caliente Resource Area of Lincoln County. Although I have only recently moved to Nevada (Feb, 1983) and am most familiar with northern Nevada, I am struck by the fact (and surprised) that there is presently only one wilderness area in Nevada (Jarbidge). I realize, of course, the leaders from Nevada are very much anti-wilderness and pro-development, and as such I would like the BLM to be aware that I personally support and strongly urge that more Nevada wilderness be set aside.



I feel that the wilderness recommendation in the Caliente Area should be expanded. Currently the Mormon Mountains' proposal would place 23,000 acres under protection. Inorder to protect critical habitat for several desert animals I would urge the BLM to support the recommended 18,132 acres. I addition I feel the following areas should be changed from the recommended BLM proposals to those of the conservationists:

Meadow Valley Range From 97,180 To 166,500
Clover Mountains → 88,000 Acres
Delamar Mtns → 102,490
South Pahrock Range - 23,375.

Thank you very much for your time.

Roy G Jones

ROY G. JONES M.D.
2085 Ruby View Drive
Elko, Nevada 89801

COMMENT LETTER 92

12/22/84

Mr. Maxwell,

I have just become aware of several Wilderness Study Areas that are being studied for wilderness designation by the BLM.

I would like you to know I support wilderness designation of several areas in Nevada & believe the acres should be increased over the current recommended acreage suggested.

They are;

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres.

Thank you.

Rick Jorco
150 Geic Ave.
Sparks, NV. 89431

COMMENT LETTER 93

SAINT MARY'S ACUTE CARE CENTER
A Department of Saint Mary's Hospital

22 December 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas NV 89106

Dear Sir:

I am writing to urge the BLM to select for Wilderness Designation the following Wilderness Study Areas:

Mormon Mountains-- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains-- 88,000 acres
Delamar Mountains-- 102,490 acres
South Pahrock Range-- 28,395 acres

I am concerned that, with the apparent renewed interest in mineral exploration and mining, that these unique, unspoiled areas will be ruined forever by development.

I believe that it is often perceived, albeit falsely, that Nevadans don't care what happens to the land outside of Las Vegas and Reno's metropolitan areas. Well, we do care and the sparse beauty of the land is one of the reasons we choose to make our home in this state.

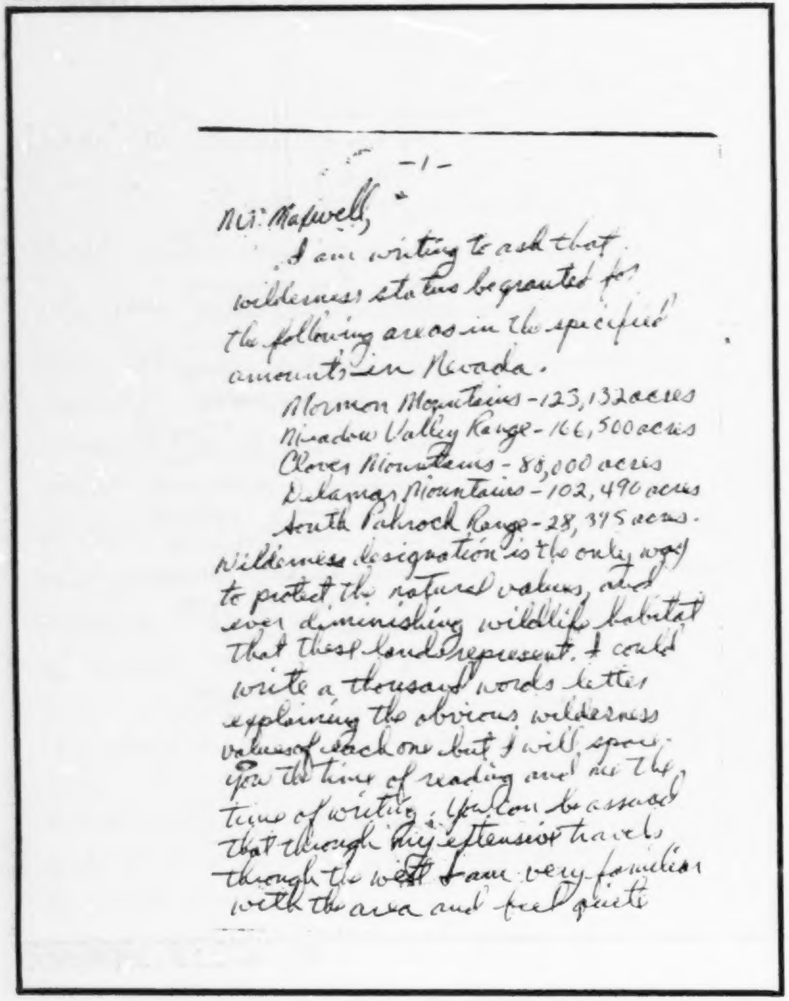
Please consider my request when making your report to Congress.

Yours Truly,

Jim K

Jim Kearns

6580 South Virginia Street, Reno, Nevada 89511 • (702) 853-3333



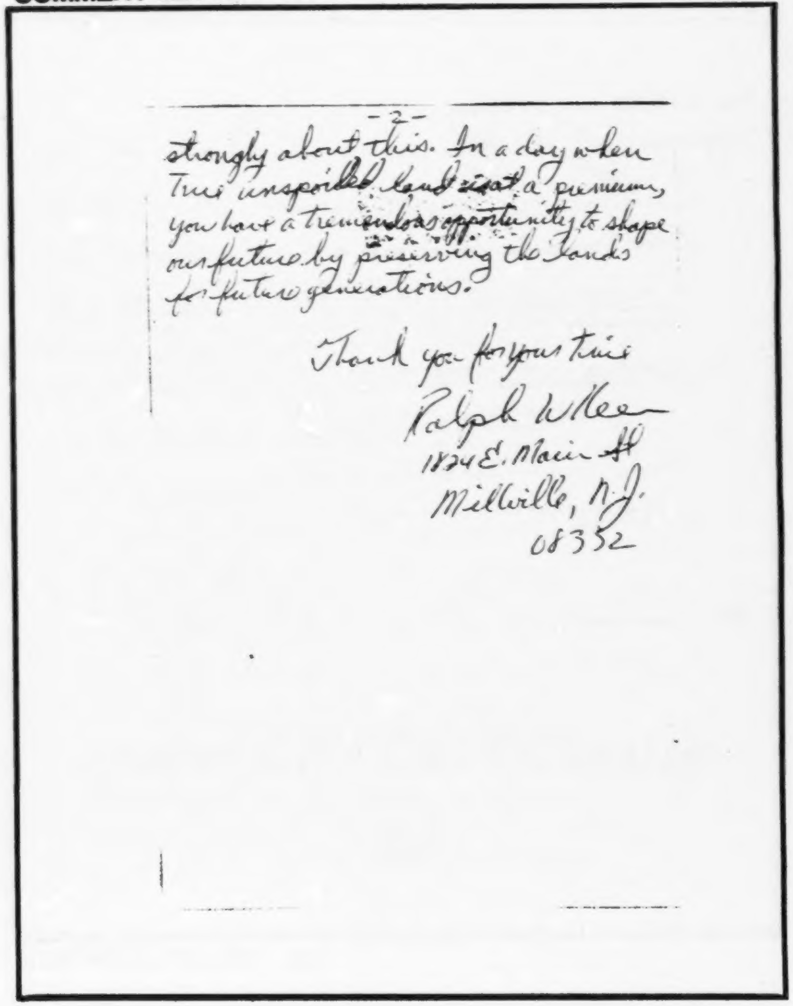
-1-

Mr. Maxwell,

I am writing to ask that wilderness status be granted for the following areas in the specified amounts in Nevada.

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,375 acres.

Wilderness designation is the only way to protect the natural values, and ever diminishing wildlife habitat that these lands represent. I could write a thousand words letters explaining the obvious wilderness values of each one but I will spare you the time of reading and me the time of writing. You can be assured that through my extensive travels through the west I am very familiar with the area and feel quite



-2-

strongly about this. In a day when true unspoiled land is at a premium, you have a tremendous opportunity to shape our future by preserving the lands for future generations.

Thank you for your time

Ralph Wilee
1824 E. Main St
Millville, N.J.
08352

COMMENT LETTER 95

KENNETH KENEVAN
CERTIFIED PUBLIC ACCOUNTANT
1221 HASKELL STREET SUITE B
RENO, NEVADA 89509
(702) 322-8337

January 2, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, Nevada 89106

Dear Frank:

I recommend the five wilderness study areas for permanent preservation, Mormon Mountains 123,000 acres, Meadow Valley Range 166,000 acres, Clover Mountains 88,000 acres, Delamar Mountains 102,000 acres, South Pahrock Range 28,000 acres. Please let me know the BLM's position on either preservation or development of these above wilderness study areas.

Sincerely,

Kenneth Kenevan

/kj

---

332 Spring Creek PKwy.
Elko, Nevada 89801
JAN. 21, 1985

Dear Wilderness Team Leader:

Regarding the Caliente Resource Area of Lincoln County I would like to go on record supporting wilderness status and acreage as follows:

1) Mormon MTS 123,132 acres
2) Clover MTS 88,000 acres
3) Delamar MTS 102,490 acres
4) South Pahrock Range 28,395 acres
5) Meadow Valley Range 166,500 acres

BLM's proposal of 23,690 acres for Mormon Mountains is un-acceptable. The 123,132 acres has exceptional cave system, archeological sites and is excellent big horn sheep habitat.

BLM's proposal of 57,180 acres for Meadow Valley Range also is un-acceptable because it does not include the bajada which to me adds much diversity to the area from a geological standpoint

COMMENT LETTER 96

BLM's proposal for Clover Mts should be expanded to include the entire Cottonwood Canyon System watershed.

BLM's proposal for "no wilderness" for the [illegible] [illegible] plateau violates the intent of wilderness review for Delamar is a unique addition to the wilderness system — real Basin & Range Country! This is what we are trying to save for future generations not just the old cliché of wilderness with snow capped peaks but expansive dry hot desert places.

I concur with the BLM's South Pahroc proposal of 28,305 acres.

Thank you,

Terry Kien

COMMENT LETTER 97

1400 Van Ness Ave.
Reno, NV 89503

December 27, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Sir,

I understand you have issued draft wilderness recommendations for five potential wilderness areas in the Caliente Resource Area of Lincoln County and are now seeking public comment on these recommendations.

I feel the five wilderness study areas under consideration -- the Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and South Pahrock Range -- all deserve wilderness designation, but feel that the acreages designated by the BLM are too sparse to really protect the natural values and wildlife habitat of these areas.

I strongly support the conservationist's suggestions:

173,322 acres for the Mormon Mtns to protect the habitat of the desert tortoise, quail, mule deer, and desert bighorn.

166,500 acres for the Meadow Valley Range in order to include the bajada.

88,000 acres for the Clover Mtns. to include the Cottonwood Canyon watershed.

102,490 acres for the Delamar Mtns. to protect the habitat of the mule deer and bighorn sheep.

23,395 acres for the Pahrock Range.

I feel that wilderness designation is the best way to protect the natural values, wildlife habitat, and recreational opportunities of these lands to be enjoyed by all of us and future generations.

Thank you for your consideration of these proposals.

Sincerely,

Barbara J. Knapp

Barbara J. Knapp

Box 82
Silver City, Nv
1/1/85 89428

Dear Mr. Maxwell:

Why do cattle ranchers control so much public land? Wherever I go in Nevada (& that's a lot of rough 4 wheelin' & hiking), if I find a spring it's full of cow shit and flies. If I camp near one of our rare creeks, I can't use the water, for I know that cattle are contaminating it.

I prospect for a ~~"[illegible]"~~ hobby (& have several unpatented claims), so I'm

2

aware that there must be at least a few areas of this state which are not auriferous -- & therefore Tennaco, Exon, etc. don't need to blast large roads through them.

We need wilderness areas now, before the land is completely into private hands. My family & I support the following areas for wilderness.

MORMON MTS - 123,132 acres
MEADOW VALLEY RNG - 166,500 acres
CLOVER MTS - 88,000 acres
DELAMAR MTS - 102,490 acres
SOUTH PAHROCK RNG - 28,395 acres

Thank you for your consideration.

W. MAKE KNAPP

COMMENT LETTER 99

1030 Hemlock Way
Broomfield, Colorado 80020
January 1, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

It is my understanding that you will soon be considering various BLM holdings in the state of Nevada for possible wilderness designation.

I would like to put my two cents in for five areas that based on what I have read seem particularly worthy of special protection:

Clover Mountain	88,000 acres
Delamar Mountains	102,490 acres
Meadow Valley Range	166,500 acres
Mormon Mountain	123,132 acres
South Pahrock Range	28,395 acres

The basin and range country is so unique and its special geologic, plant and wildlife relationships need protection. I hope you and your team agree and will recommend wilderness designation for the above areas and other appropriate BLM-administered land in Nevada. Once we open lands to development, their natural values are lost for all time.

I for one believe that the long-term value of unique lands in their natural state far outweighs the short-term value of development.

I appreciate your consideration of this matter.

Yours truly,

Joseph J. Krieg
Joseph J. Krieg

COMMENT LETTER 100

[redacted]

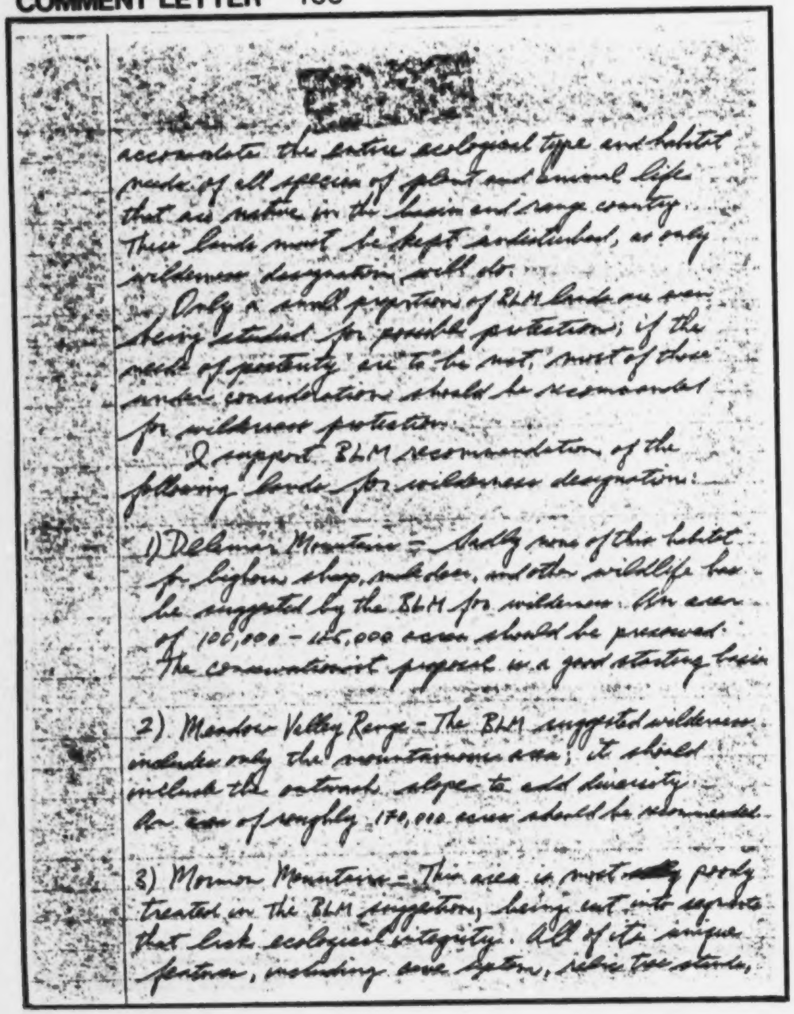
Lowell Kressner
34 Beacon St.
So. Burlington, Vt. 05401
Jan 6, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
Las Vegas, Nevada

Dear Mr. Maxwell

I am writing regarding the recommendations for wilderness designation of certain lands in the Caliente Resource Area. I believe it is essential that we complete our National Wilderness System with examples of each land form and ecological type which exists within the United States. In this way we can hope to retain the necessary habitats and genetic diversity which are needed to assure continuing survival of our native plants, wildlife, and soil microorganisms, as well as land

During 1984 several wilderness areas were designated in New England, thus preserving some of our mountains and forests. We do not, however, have the basin and range country which was so beautifully described by John McPhee in his recent book. We in New England look to the BLM and its vast lands under stewardship in the West for a suitable appropriation of lands to preserve. Such lands must be large enough in size to



[redacted]

accomodate the entire ecological type and habitat needs of all species of plant and animal life that are native in the basin and range country. These lands must be kept undisturbed, as only wilderness designation will do.

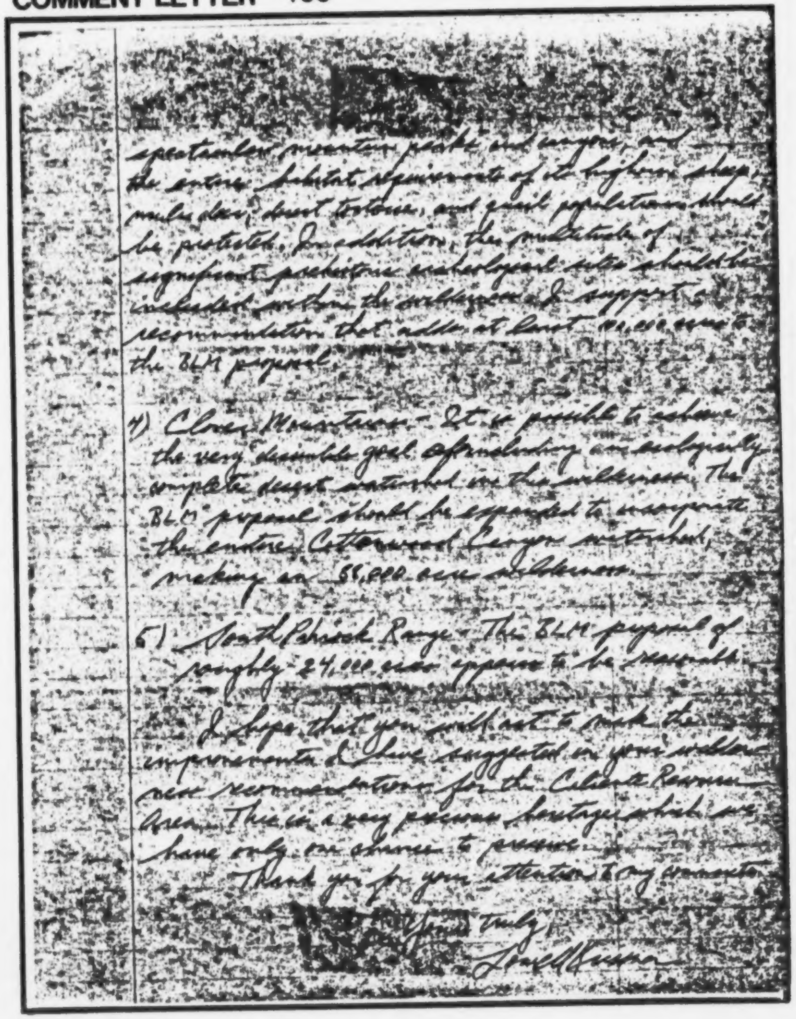
Only a small proportion of BLM lands are even being studied for possible protection; if the needs of posterity are to be met, most of those under consideration should be recommended for wilderness protection.

I support BLM recommendation of the following lands for wilderness designation:

1) Delamar Mountains – Hardly none of this habitat for bighorn sheep, mule deer, and other wildlife has be suggested by the BLM for wilderness. An area of 100,000 – 125,000 acres should be preserved. The conservationist proposal is a good starting basis

2) Meadow Valley Range – The BLM suggested wilderness includes only the mountainous area; it should include the outwash slope to add diversity. An area of roughly 170,000 acres should be recommended.

3) Mormon Mountains – This area is most poorly treated in the BLM suggestion, being cut into segments that lack ecological integrity. All of its unique features, including cave system, relic tree stands,



[redacted]

spectacular mountain peaks and canyons, and the entire habitat requirements of its bighorn sheep, mule deer, desert tortoise, and quail populations should be protected. In addition, the multitude of significant prehistoric archeological sites should be included within the wilderness. I support a recommendation that adds at least 40,000 acres to the BLM proposal.

4) Clover Mountains – It is possible to achieve the very desirable goal of including an ecologically complete desert watershed in this wilderness. The BLM proposal should be expanded to incorporate the entire Cottonwood Canyon watershed, making an 85,000 acre wilderness.

5) South Pahroc Range – The BLM proposal of roughly 24,000 acres appears to be reasonable.

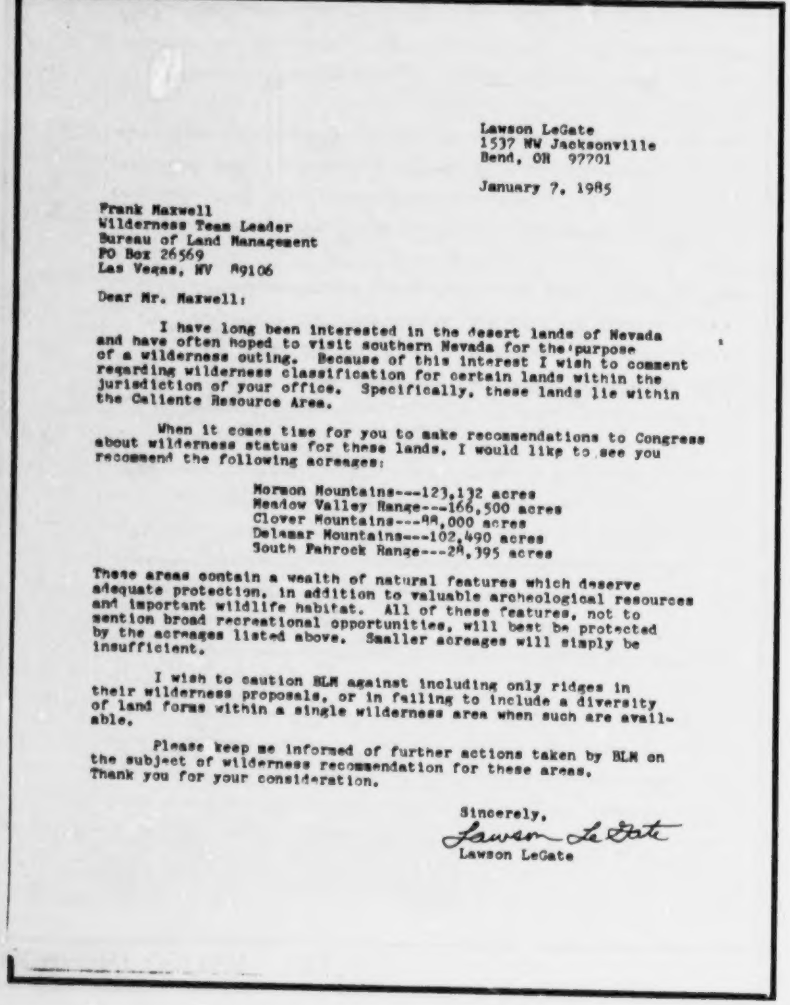
I hope that you will act to make the improvements I have suggested in your wilderness recommendations for the Caliente Resource Area. This is a very precious heritage which we have only one chance to preserve.

Thank you for your attention to my comments.

[redacted]

Yours truly,

COMMENT LETTER 101



Lawson LeGate
1537 NW Jacksonville
Bend, OR 97701

January 7, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

I have long been interested in the desert lands of Nevada and have often hoped to visit southern Nevada for the purpose of a wilderness outing. Because of this interest I wish to comment regarding wilderness classification for certain lands within the jurisdiction of your office. Specifically, these lands lie within the Caliente Resource Area.

When it comes time for you to make recommendations to Congress about wilderness status for these lands, I would like to see you recommend the following acreages:

Mormon Mountains---123,132 acres
Meadow Valley Range---166,500 acres
Clover Mountains---88,000 acres
Delamar Mountains---102,490 acres
South Pahrock Range---28,395 acres

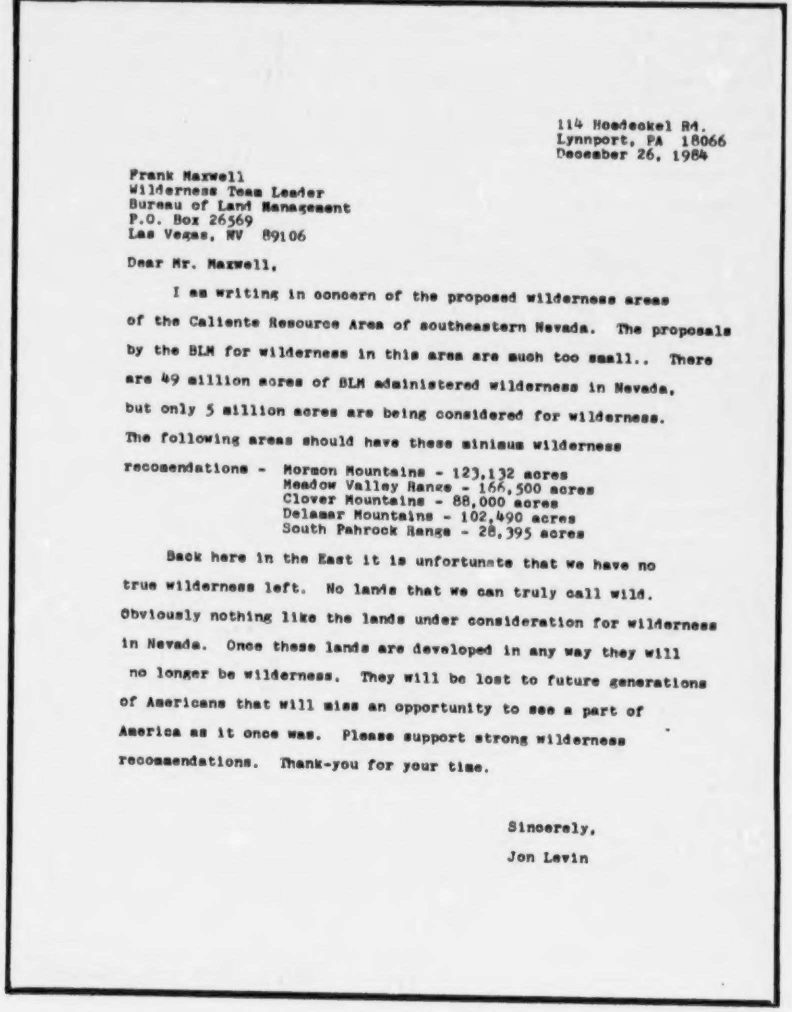
These areas contain a wealth of natural features which deserve adequate protection, in addition to valuable archeological resources and important wildlife habitat. All of these features, not to mention broad recreational opportunities, will best be protected by the acreages listed above. Smaller acreages will simply be insufficient.

I wish to caution BLM against including only ridges in their wilderness proposals, or in failing to include a diversity of land forms within a single wilderness area when such are available.

Please keep me informed of further actions taken by BLM on the subject of wilderness recommendation for these areas. Thank you for your consideration.

Sincerely,
Lawson LeGate
Lawson LeGate

COMMENT LETTER 102



114 Hoedeckel Rd.
Lynnport, PA 18066
December 26, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

I am writing in concern of the proposed wilderness areas of the Caliente Resource Area of southeastern Nevada. The proposals by the BLM for wilderness in this area are much too small.. There are 49 million acres of BLM administered wilderness in Nevada, but only 5 million acres are being considered for wilderness. The following areas should have these minimum wilderness recomendations - Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

Back here in the East it is unfortunate that we have no true wilderness left. No lands that we can truly call wild. Obviously nothing like the lands under consideration for wilderness in Nevada. Once these lands are developed in any way they will no longer be wilderness. They will be lost to future generations of Americans that will miss an opportunity to see a part of America as it once was. Please support strong wilderness recommendations. Thank-you for your time.

Sincerely,

Jon Levin

COMMENT LETTER 103

Frank: I am a hiker here in southern Nevada. I appreciate wilderness areas and Believe in Their preservation. This not only for my use, But to enable the American people to enjoy wilderness in the future. 5 areas in the Caliente Resource vicinity of Lincoln county are much in need in the scope of our nation's heritage preservation

MORMAN MOUNTS – 123,000 ACRES
CLOVER MOUNTS – 88,000
S PAHROCK – 28,000
DELMAR – 102,000
MEADOW Valley – 167,000

thanks,
Mike

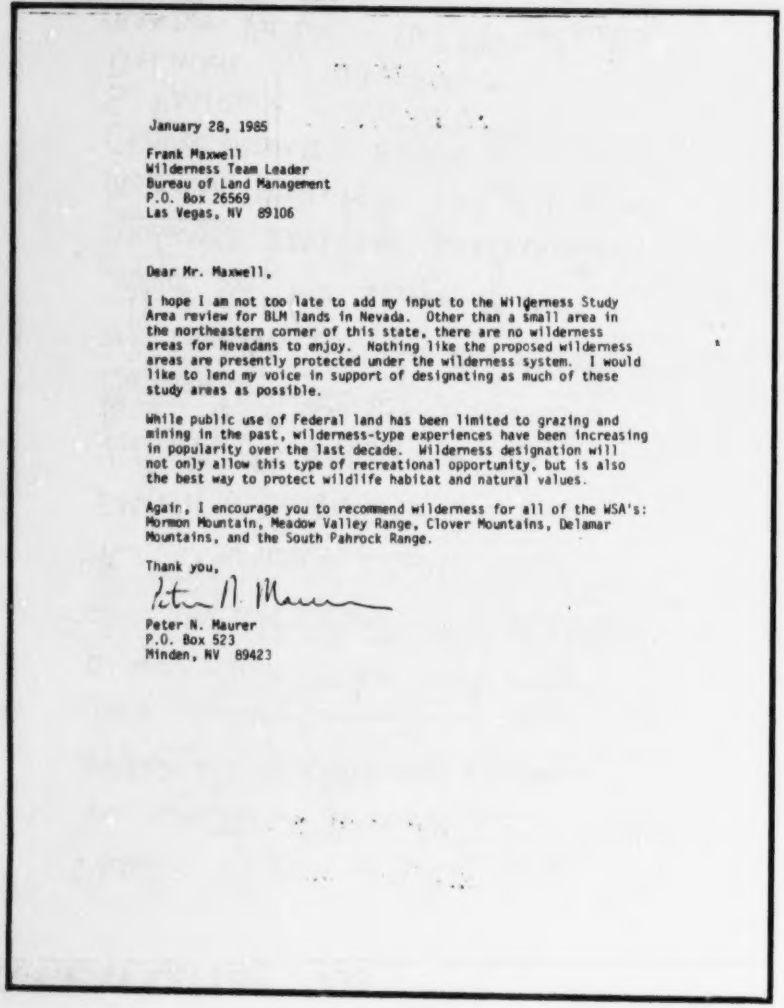
COMMENT LETTER 104

With regard to the current WSAs:
I would like to make my support for wilderness known. I like the tendency to – seemingly – concentrate on areas naturally somewhat inaccessible to ORVs. I do not care for some proposals that have WSA boundaries cutting ridge lines and canyons in a manner intensifying the difficulty of management.
The South Pahrock Range BLM preferred alternative seems to Fit most congenially with most regards.

Thank you –
Mike

Mike Lovinger
2983 Gala St.
Las Vegas, NV 89109

COMMENT LETTER 105



January 28, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

I hope I am not too late to add my input to the Wilderness Study Area review for BLM lands in Nevada. Other than a small area in the northeastern corner of this state, there are no wilderness areas for Nevadans to enjoy. Nothing like the proposed wilderness areas are presently protected under the wilderness system. I would like to lend my voice in support of designating as much of these study areas as possible.

While public use of Federal land has been limited to grazing and mining in the past, wilderness-type experiences have been increasing in popularity over the last decade. Wilderness designation will not only allow this type of recreational opportunity, but is also the best way to protect wildlife habitat and natural values.

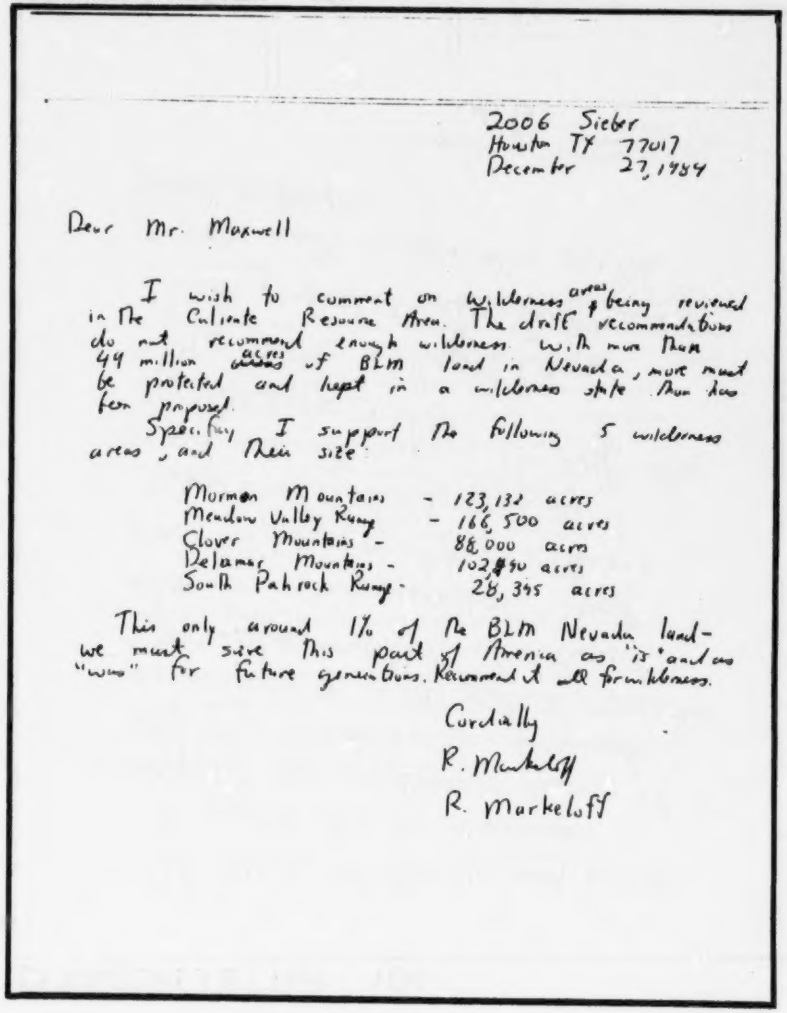
Again, I encourage you to recommend wilderness for all of the WSA's: Mormon Mountain, Meadow Valley Range, Clover Mountains, Delamar Mountains, and the South Pahrock Range.

Thank you,

Peter N. Maurer

Peter N. Maurer
P.O. Box 523
Minden, NV 89423

COMMENT LETTER 106



2006 Sieber
Houston TX 77017
December 27, 1984

Dear Mr. Maxwell

I wish to comment on wilderness areas being reviewed in the Caliente Resource Area. The draft recommendations do not recommend enough wilderness. With more than 44 million acres of BLM land in Nevada, more must be protected and kept in a wilderness state than has been proposed.

Specifically I support the following 5 wilderness areas, and their size:

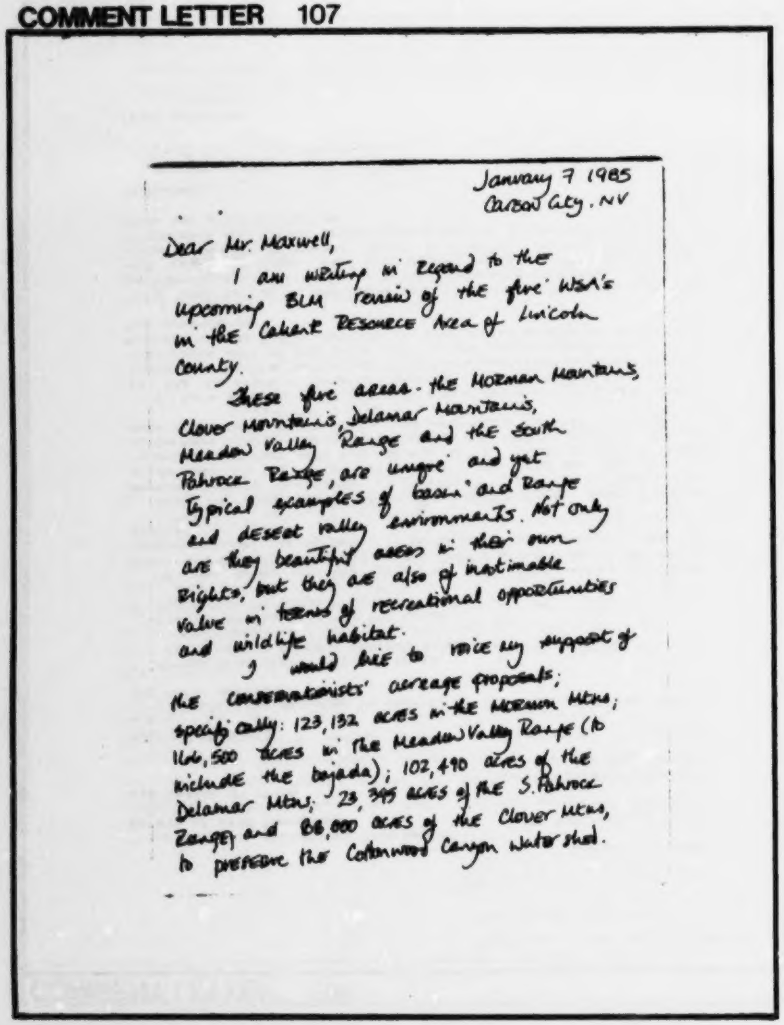
Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,890 acres
South Pahrock Range - 28,345 acres

This only around 1% of the BLM Nevada land - we must save this part of America as "is" and as "was" for future generations. Recommend it all for wilderness.

Cordially

R. Markeloff

R. Markeloff



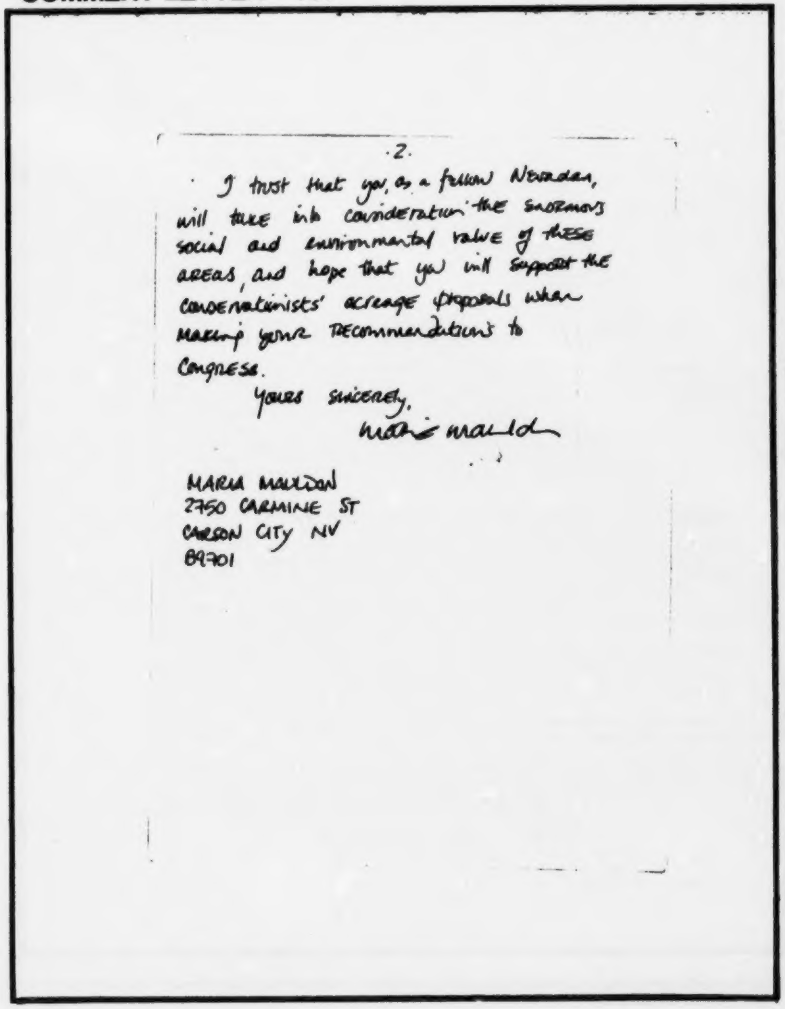
January 7 1985
Carson City, NV

Dear Mr. Maxwell,

I am writing in regard to the upcoming BLM review of the five WSA's in the Caliente Resource Area of Lincoln County.

These five areas - the Mormon Mountains, Clover Mountains, Delamar Mountains, Meadow Valley Range and the South Pahroc Range, are unique and yet typical examples of basin and range and desert valley environments. Not only are they beautiful areas in their own rights, but they are also of inestimable value in terms of recreational opportunities and wildlife habitat.

I would like to voice my support of the conservationists' acreage proposals; specifically: 123,132 acres in the Mormon Mtns; 166,500 acres in the Meadow Valley Range (to include the bajada); 102,490 acres of the Delamar Mtns; 23,395 acres of the S. Pahroc Range; and 88,000 acres of the Clover Mtns, to preserve the Cottonwood Canyon watershed.

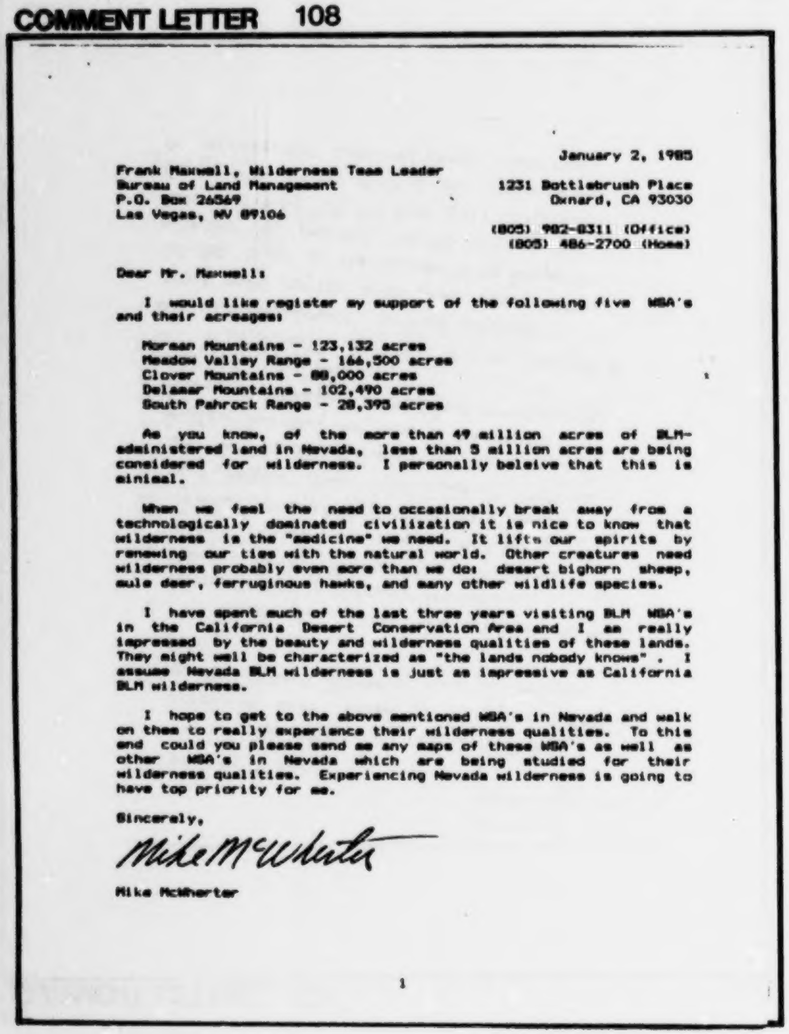


·2·

I trust that you, as a fellow Nevadan, will take into consideration the enormous social and environmental value of these areas, and hope that you will support the conservationists' acreage proposals when making your recommendations to Congress.

Yours sincerely,
Maria Mauldon

MARIA MAULDON
2750 CARMINE ST
CARSON CITY NV
89701



January 2, 1985

1231 Bottlebrush Place
Oxnard, CA 93030

(805) 982-8311 (Office)
(805) 486-2700 (Home)

Frank Maxwell, Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

I would like register my support of the following five WSA's and their acreages:

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

As you know, of the more than 49 million acres of BLM-administered land in Nevada, less than 5 million acres are being considered for wilderness. I personally beleive that this is minimal.

When we feel the need to occasionally break away from a technologically dominated civilization it is nice to know that wilderness is the "medicine" we need. It lifts our spirits by renewing our ties with the natural world. Other creatures need wilderness probably even more than we do: desert bighorn sheep, mule deer, ferruginous hawks, and many other wildlife species.

I have spent much of the last three years visiting BLM WSA's in the California Desert Conservation Area and I am really impressed by the beauty and wilderness qualities of these lands. They might well be characterized as "the lands nobody knows" . I assume Nevada BLM wilderness is just as impressive as California BLM wilderness.

I hope to get to the above mentioned WSA's in Nevada and walk on them to really experience their wilderness qualities. To this end could you please send me any maps of these WSA's as well as other WSA's in Nevada which are being studied for their wilderness qualities. Experiencing Nevada wilderness is going to have top priority for me.

Sincerely,

Mike McWhorter

Mike McWhorter

1

COMMENT LETTER 109

From: P.Magowan
3000 NE Newcastle
Corvallis OR
97330

To: Mr. Frank Maxwell
Wilderness Team Leader
BLM

RECEIVED
JAN 10

I'd like to express my support for wilderness designation for the following 5 WSA's w/ accompanying acreages

Mormon Mtns	123,132 acres
South Pahroc Range	28,395
Delamar Mtns	102,490
Meadow Valley Range	166,500
Clover Mtns.	88,000

I strongly urge you to give wilderness designation in particular to keep these small portions of our great basin and range province in nearly pristine condition. I am aware of smaller acreages you are considering and hope you will expand them up to at least the figures above to give wildlife larger buffer areas and increase the diversity of geological and ecological features preserved.

Thanks for your efforts (whatever you decide) in studying wilderness areas there in Nevada. I mostly get around farther north now (Skiing, Whitewater) but some years back when I lived in California I explored in your part of the world and enjoyed it much.

Yours

Patrick J. Magowan
grad student Physical Geog; OSU
software engineer; Hewlett Packard

COMMENT LETTER 110

Mr. Frank Maxwell
EIS TeamLeader
BLM Las Vegas District
Las Vegas, NV 89126

14.11,84.

Dear Mr.Maxwell,

Presently I am writing my comments to the Caliente RA Draft EIS and need the additional information and clarification:

1 1. When BLM grants a right-of-way, can the holder of your permit legally ban all crossings by the public across the right-of way and by doing so blocking vast areas from public access.to BLM lands beyond having no other easy access?
Case in point is in your wilderness DEIS p 4-12 second column a mention is made that the Union Pacific has blocked off access to the lands (BLM) into SW part of Glover Mtn. WSA.
Any other WSA-s blocked off by existing or proposed right-of-way grants?

2. Unfortunately your Caliente Wilderness DEIS WSA maps have omitted the information of all ways and roads on the WSA maps?
This omission makes it difficult to comment on suitability Bor wilderness based on naturalness. You show only a few of those, which you plan to cherrystem! You prefer not to inform the public of the extent of others. Some major ones like the Vigo Canyon roadway in Meadow Valley Range WSA are not shown.
Moreover this selective omission is counter to the common practis by other BLM Districts reports in Nevada.
I invite you to examine for example the Wells RA Wilderness Technical Report maps where every way and road is indicated and identified with a number so that the public has a clear idea and can specifically commnet. Like the Goshute Peak WSA Map-6 shows no less than all of the thirty ways.
Your presentation leaves a false and pro-wilderness impressions.'
Why could and would you not follow a well established BLM practice

3. Please send me copies of your WSA maps showing all ways and roads regardless to your preference for or against cherry stemming.
I am specially in need for the following WSA unit maps for'
Meadow Valley; Mormon Mtns and Clover Mtn WSA-s

Sincerely, Harry Melts

Harry Melts
P.O. Box 64
Porthill, ID 83853

RESPONSE LETTER 110

Response to Letter 110

1. Normally, rights-of-way are fully passable. A railroad represents a hazardous situation. Therefore, a legal crossing of the railroad requires either an officially dedicated road crossing or notification of the railroad so their personnel may supervise the crossing attempt. Any other crossing may create a liability on the part of the crosser. The unofficial access at Cottonwood Creek has been obtained by digging out the drainage-way under the track to let a vehicle underneath. The barrier is created by flood debris filling in the channel.

COMMENT LETTER 111

RECEIVED
1984 NOV 2
LAS VEGAS
BURE
LAND MA

21.11.84.

Mr.Kemp Conn
District Manager
P.O.Box 26569
Las Vegas,NV 89126

Dear Mr. Conn,

Subject: Caliente Draft Wilderness EIS.

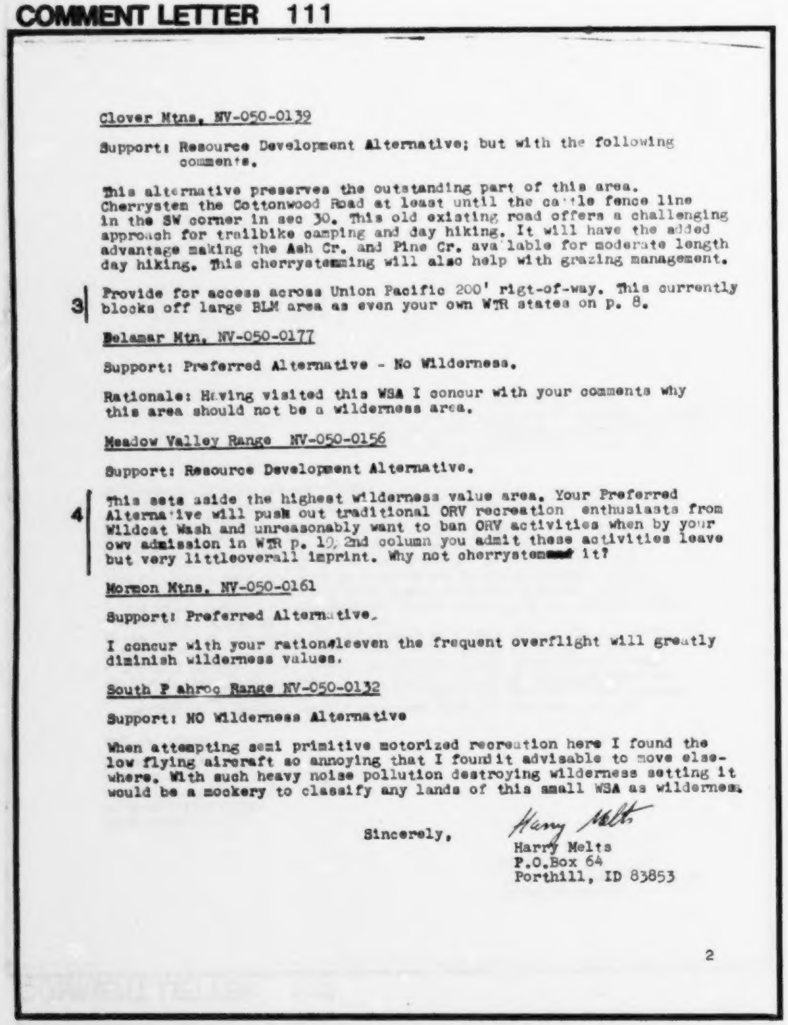
General Comments: Where Wilderness Areas are suggested more roads and ways should be cherrystemmed. Ca 90% hiking in primitive and semi-primitive setting is day hiking. Overnight backpacking is infrequent and is likely to remain so.

1 On p.3-1 the DEIS states with theoretical correctness but practical unreality: "It is important to remember that lack of water does not preclude wilderness quality" Quality yes but practical opportunity to make use of that quality - NO. Hiking into the core of a proposed WA becomes more practical from a support vehicle from a cherrystemmed way or road.

2 Maps: The maps included with the report are misleading in that these does not show most roads or ways in existance. This omission makes for the public difficult to comment. I invite the Team Leader to study how other Districts and Resource Areas have prepared their support maps. As example: the Elko District, Wells Resource Area (RA) has drawn in every way and road. Also indexed and numbered these for easy comments. Their Livestock/Watershed map for Goshute Peak(Map - 6)has all thirty ways so marked! So have others. Why not Las Vegas District?
You mentioned Range and Township references frequently in your text without marking this information on the margins where the maps do not contain that information (Example : Clover Mtn., Delamar Mtns etc.)
I mention these items to illustrate the elimination of information which could weaken the naturalness rating in the proposed WAs.
This DEIS prowilderness fervor and anti ORV reporting at times goes to extreme albeit humorous lengths! On p.3-6 under listing of recreational activities the recreation planner puts frog gigging into 3rd place on his list and ORV use into 15th and last place!
It appears that the Team's personal preferences overshadow professionalism! ORV recreation is the most widely ocurring recreational use in BLM Las Vegas District and that fact should be recognized in your DEIS.

page 1 of 2

COMMENT LETTER 111



Clover Mtns, NV-050-0139

Support: Resource Development Alternative; but with the following comments.

This alternative preserves the outstanding part of this area. Cherrystem the Cottonwood Road at least until the cattle fence line in the SW corner in sec 30. This old existing road offers a challenging approach for trailbike camping and day hiking. It will have the added advantage making the Ash Cr. and Pine Cr. available for moderate length day hiking. This cherrystemming will also help with grazing management.

3 Provide for access across Union Pacific 200' rigt-of-way. This currently blocks off large BLM area as even your own WTR states on p. 8.

Delamar Mtn, NV-050-0177

Support: Preferred Alternative - No Wilderness.

Rationale: Having visited this WSA I concur with your comments why this area should not be a wilderness area.

Meadow Valley Range NV-050-0156

Support: Resource Development Alternative.

4 This sets aside the highest wilderness value area. Your Preferred Alternative will push out traditional ORV recreation enthusiasts from Wildcat Wash and unreasonably want to ban ORV activities when by your owv admission in WTR p. 19, 2nd column you admit these activities leave but very littleoverall imprint. Why not cherrystem[illegible] it?

Mormon Mtns, NV-050-0161

Support: Preferred Alternative.

I concur with your rationaleeven the frequent overflight will greatly diminish wilderness values.

South Pahroc Range NV-050-0132

Support: NO Wilderness Alternative

When attempting semi primitive motorized recreation here I found the low flying aircraft so annoying that I foundit advisable to move elsewhere. With such heavy noise pollution destroying wilderness setting it would be a mockery to classify any lands of this small WSA as wilderness.

Sincerely,

Harry Melts

Harry Melts
P.O.Box 64
Porthill, ID 83853

RESPONSE LETTER 111

Response to Letter 111

1. The passage quoted has been deleted from the EIS. Wilderness is established for more than just recreation purposes. It is also established for ecological reasons. During the cool season, water requirements are much reduced as well.

2. Ways have been added to maps as well as township and range data. Recreational pursuits were not listed in order of importance. This list has been removed from the text. ORV use is discussed as part of the recreation issue, which indicates its importance.

3. Legally crossing the railroad requires either an officially dedicated road crossing or notification of the railroad so their personnel may supervise the crossing attempt. Any other crossing may create a liability of the part of the crosser. The unofficial access at Cottonwood Creek has been obtained by digging out the drainage-way under the track to let a vehicle underneath.

4. There are nearly limitless opportunities within the Resource Area for ORV activities. Closing this little-used area constitutes an insignificant impact. Wildcat Wash is occasionally used by ORVs, but it doesn't meet the definition of a "road" and therefore cannot be cherrystemmed.

COMMENT LETTER 112

MICHAEL S. HEMMER
10814 STONE CANYON Dr. #1156
DALLAS , TEXAS 75230

FRANK MAXWELL
WILDERNESS TEAM LEADER
BUREAU OF LAND MANAGEMENT
P.O. BOX 26569
LAS VEGAS , NV 89106

Dear Mr. Maxwell,

Designation of complete habitat wilderness areas is important. In the desert of California there is a fence that devides the land into public land and the Joshua Tree National Monument. I remember that on the park side there was a diversity of plant life in bloom. On the public side there were dune buggy tracks, beer cans, 22 shell cases, and no plant life in bloom. That fence was in the middle of the valley such that hiking on a small hill in the park would make visible the eye sore.

The above example shows the need for federal help to keep our heritage from being destroyed by the few,and that there must be proper planning. There are five wilderness areas that need to be designated as BLM wilderness. There total area would only be 10% of the land in Nevada. Those areas are Mormon Mountains (123,132 acres), Meadow Valley Range (166,500 acres), Clover Mountains (88,000 acres), Delamar Mountains (102,490 acres), and South Pahrock Range (28,395 acres).

A complete habitat is an area that can exist without having special problems. So, please designation the above lands.

Sincerely,
Michael S Hemmer
Michael S. Hemmer

COMMENT LETTER 113

2900 South Glebe Road, #508

Arlington, Virginia 22206

22 January 1985

Frank Maxwell, Wilderness Team Leader

Bureau of Land Management

P. O. Box 26569

Las Vegas, Nevada 89106

Dear Sir:

I support establishing widernesses of the acreages below for these Wilderness Study Areas:

Clover Mountains: 88,000 acres

Delamar Mountains: 102,490 acres

Meadow Valley Range: 166,500 acres

Mormon Mountains: 123,132 acres

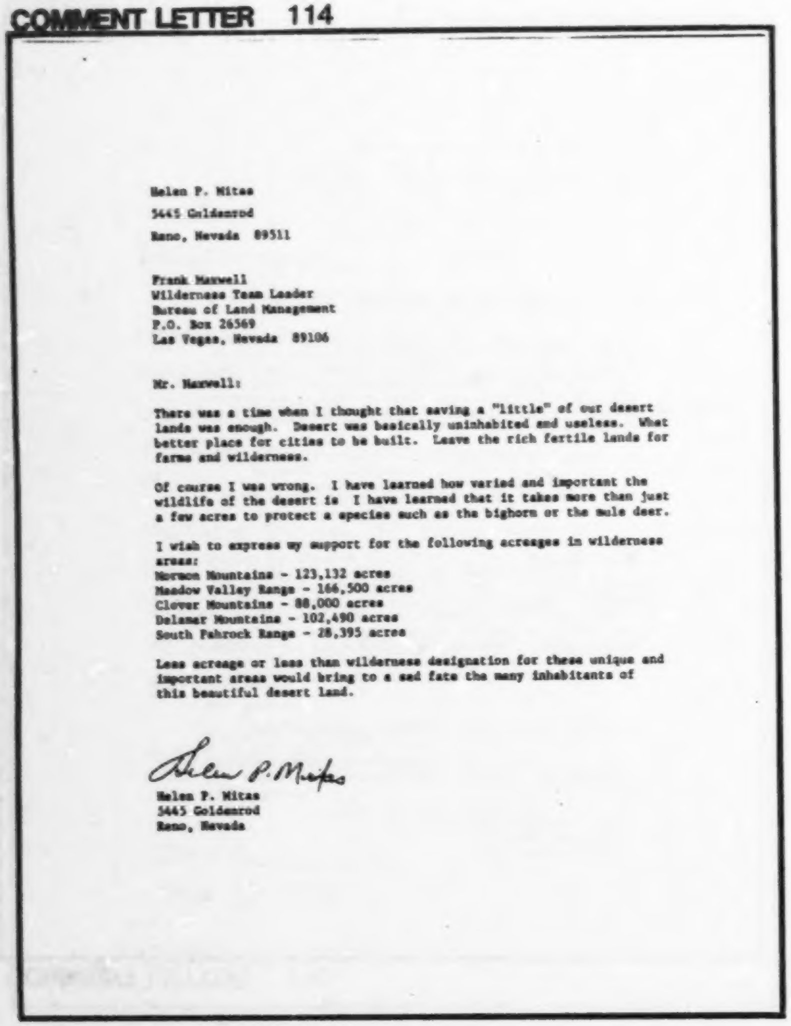
South Pahrock Range: 28,395 acres

Wilderness designation is necessary to protect the natural values, wildlife habitat and recreational opportunites of these lands for the enjoyment of all.

Sincerely,

Thomas J Messenger
Thomas J. Messenger

COMMENT LETTER 114



Helen P. Mitas
5445 Goldenrod
Reno, Nevada 89511

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Mr. Maxwell:

There was a time when I thought that saving a "little" of our desert lands was enough. Desert was basically uninhabited and useless. What better place for cities to be built. Leave the rich fertile lands for farms and wilderness.

Of course I was wrong. I have learned how varied and important the wildlife of the desert is I have learned that it takes more than just a few acres to protect a species such as the bighorn or the mule deer.

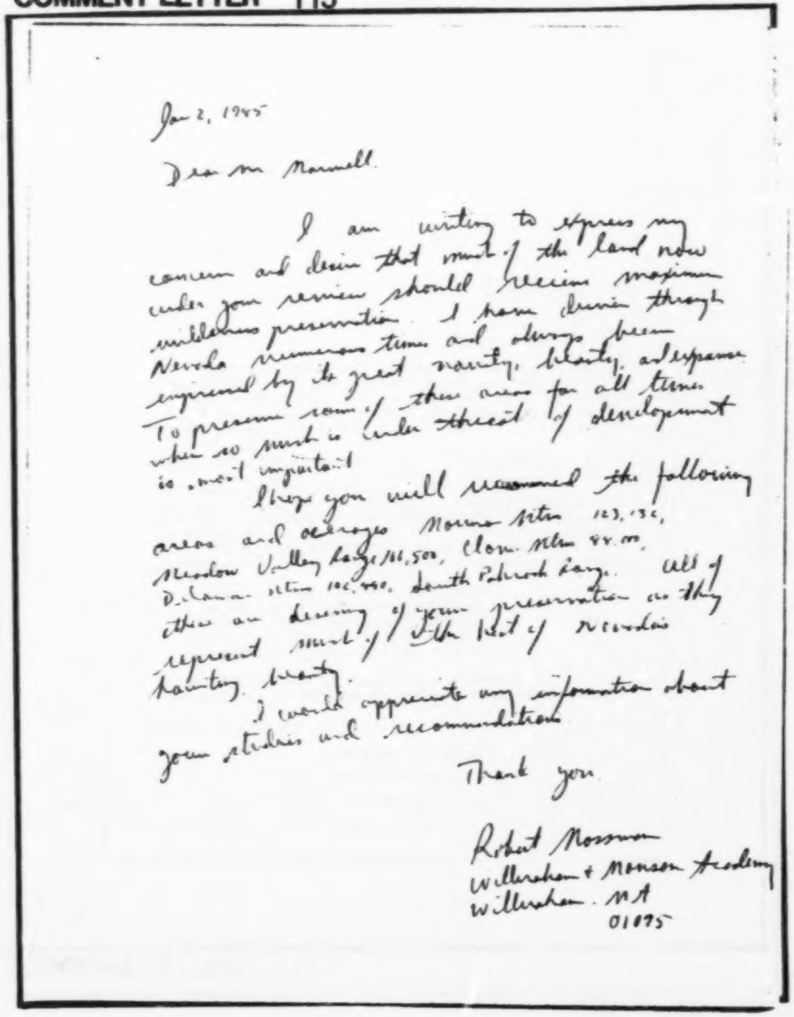
I wish to express my support for the following acreages in wilderness areas:
Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

Less acreage or less than wilderness designation for these unique and important areas would bring to a sad fate the many inhabitants of this beautiful desert land.

Helen P. Mitas

Helen P. Mitas
5445 Goldenrod
Reno, Nevada

COMMENT LETTER 115



Jan 2, 1985

Dear Mr Maxwell.

I am writing to express my concern and desire that most of the land now under your review should receive maximum wilderness preservation. I have driven through Nevada numerous times and always been impressed by its great variety, beauty, and expanse. To preserve some of these areas for all times when so much is under threat of development is most important.

I hope you will recommend the following areas and acreages Mormon Mtns 123,132, Meadow Valley Range 166,500, Clover Mtns 88,000, Delamar Mtns 102,490, South Pahrock Range. All of these are deserving of your preservation as they represent much of the best of Nevada's haunting beauty.

I would appreciate any information about your studies and recommendations.

Thank you

Robert Mossman
Wilbraham + Monson Academy
Wilbraham. MA
01095

COMMENT LETTER 116

P.O. Box 324
Skagway, AK 99840
January 25, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Mr. Maxwell:

Within the Caliente Resource area, there are presently five natural areas that are being considered for wilderness designation. They are the Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and the South Pahrock Range. The BLM recently released its own recommendations regarding the future land use in these areas, and I believe that they fall well short of their proper wilderness acreages. I feel the following areas deserve the suggested wilderness acreages:

Mormon Mountains	123,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delamar Mountains	102,490 acres
S. Pahrock Range	28,395 acres

Each of these acreages are some of the relatively few areas being proposed for wilderness designation in Nevada, a state with much open land but very little designated wilderness land. Together, they offer outstanding scenery, valuable wildlife habitat, watershed preservation, and other valuable characteristics.

Please consider the above acreages for designated wilderness protection.

Sincerely,

Frank Norris

Frank Norris

COMMENT LETTER 117

David W. O'Bryan
1550 Allen Street
Reno, Nevada 89509
December 25, 1984

Dear Mr. Maxwell:

I would like to ~~express~~ express my support of wilderness designation for the following five areas:

Mormon Mountains	123,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delamar Mountains	102,490 acres
South Pahrock Range	28,395 acres.

I believe that wilderness designation for these areas would secure their wildlife potential, which is very important to me and to many other hunters in Nevada. Thr_ough this designation the land may be preserved for future generations and for the widest possible enjoyment of all the people.

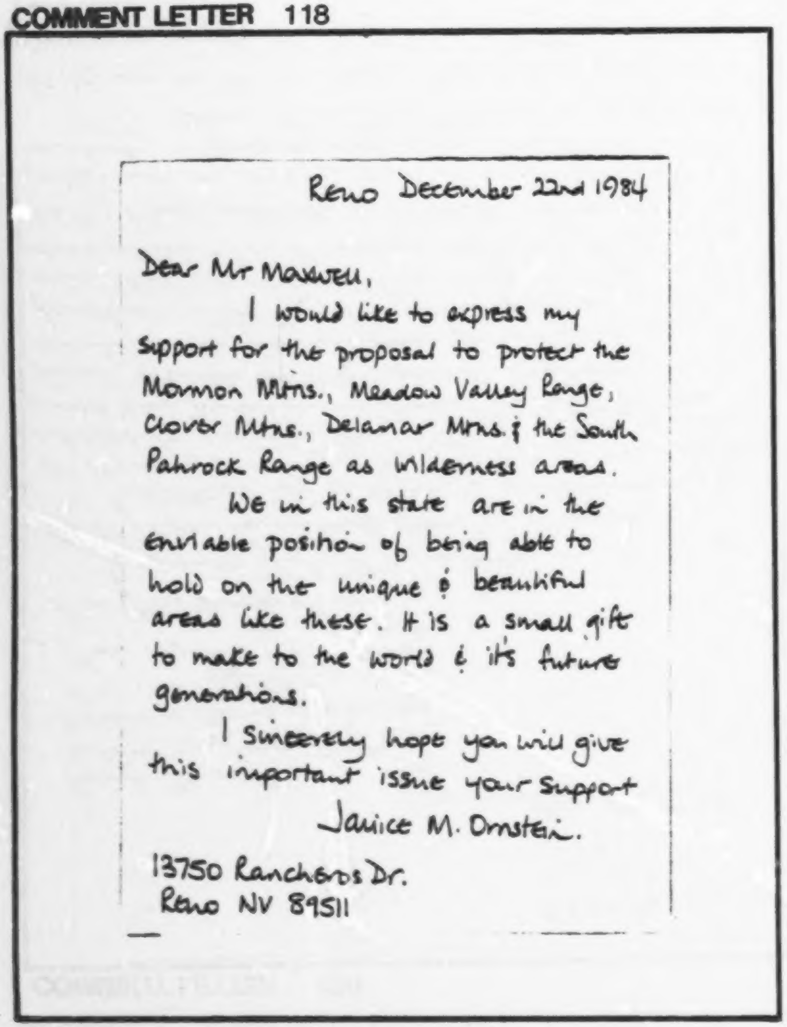
Thank you very much.

Sincerely,

Dan O'Bryan

Dan O'Bryan

COMMENT LETTER 118



Reno December 22nd 1984

Dear Mr Maxwell,

I would like to express my support for the proposal to protect the Mormon Mtns., Meadow Valley Range, Clover Mtns., Delamar Mtns. & the South Pahrock Range as wilderness areas.

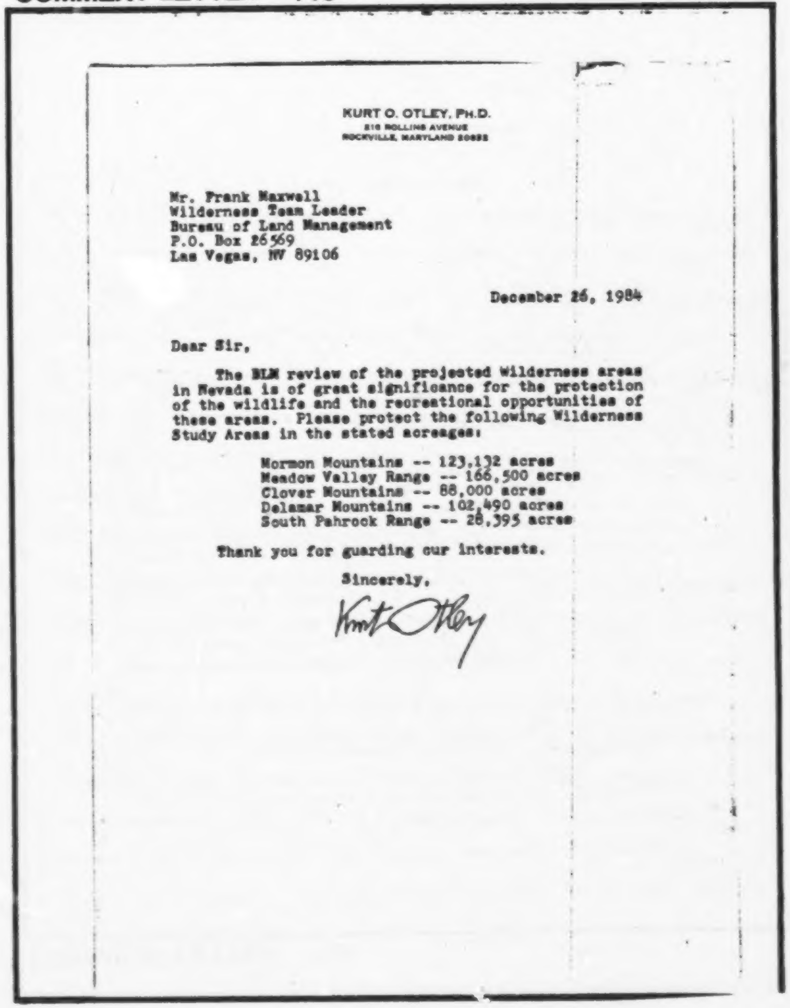
We in this state are in the enviable position of being able to hold on the unique & beautiful areas like these. It is a small gift to make to the world & it's future generations.

I sincerely hope you will give this important issue your support

Janice M. Ornstein.

13750 Rancheros Dr.
Reno NV 89511

COMMENT LETTER 119



KURT O. OTLEY, PH.D.
210 ROLLINS AVENUE
ROCKVILLE, MARYLAND 20852

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

December 26, 1984

Dear Sir,

The BLM review of the projected Wilderness areas in Nevada is of great significance for the protection of the wildlife and the recreational opportunities of these areas. Please protect the following Wilderness Study Areas in the stated acreages:

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 88,000 acres
Delamar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

Thank you for guarding our interests.

Sincerely,

Kurt Otley

RR 27 Box 282
Terre Haute IN
47802
Dec. 30, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV. 89106

Dear Mr. Maxwell

I would like to comment on some of the Wilderness Study Areas in Nevada.

I favor 123,132 acres of wilderness for the Mormon Mountain area. The whole cave system should be protected there. This acreage in wilderness would also protect some crucial habitat for the desert tortoise and the desert bighorn. It would also prevent some future management problems that could arise from a smaller area that would contain only part of an ecosystem. For the same reasons the Meadow Valley Range should include the alluvial outwash or bajada, and thus should include approximately 166,500 acres.

The Clover Mountain Wilderness should be expanded to include the entire Cottonwood Canyon watershed; thus protecting the

whole desert stream. This 88000 acre area contains some magnificant scenery. I would also suggest that the whole plateau of the Delmar Mountains which has mule deer and bighorn sheep be made a wilderness area. This area is about 102,490 acres. I would also suggest that the relatively small, 23,395 acres of the South Pahroc Range be made a wilderness area.

Wilderness designation is the best way to preserve the scenery, wildlife habitat, and plant life, and recreational values of these lands so that they can be enjoyed by all of us; and by future generations. The more varied the areas that have wilderness designation the more varied habitat for wildlife and plants will be preserved.

Sincerely

Joe O. Osmond

COMMENT LETTER 121

DAVID N. PADDOCK
[illegible] CLINTON AVENUE • NORTH PLAINFIELD, NEW JERSEY [illegible]

Mr Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
Box 26569
Las Vegas, Nevada 89106

Dear Mr Maxwell:

I would like to take this opportunity to go on record as supporting full wilderness designation for the following areas:

Meadow Valley Range	166,500 acres
Mormon Mtns.	123,132 "
Delamar Mtns.	102,490 "
Clover Mtns.	88,000 "
So. Pahrock Range	28,395 " .

Wilderness best protects these lands as an ecological and economic (via recreation) resource for the future.

Sincerely,
David N Paddock

COMMENT LETTER 122

December 27, 1984

TO: Kemp Conn, District Manager
4765 W. Vegas Drive
Las Vegas, NV 89126

FROM: Becky Parr
5303 Stampa Ave.
Las Vegas, NV 89102

RE: Caliente DRAFT Wilderness Environmental Impact Statement

Dear Mr. Conn,

I would like to take this opportunity to express my views on the Caliente Draft Wilderness Environmental Impact Statement. Wilderness for Nevada is an important issue. The Wilderness Study Areas (WSA's) described in the draft and technical reports deserve recognition and inclusion in the recommendations sent to the President. The need for wilderness in close proximity to a major metropolitan area, i.e. Las Vegas, cannot be stressed enough. As Las Vegas and the surrounding areas grow, the pressures of urban life will require a place of solitude and aesthetic beauty within reach of the community. An outlet for suburban residents to retreat to, or just to know a retreat is available, would enhance the quality of life for residents.

The five subject WSA's have qualities that make each worthy of selection as a wilderness area. The Bureau of Mines has stated on page 5-2 the need to wait to develope boundaries for the WSA's according to Resource Development Alternatives or recommend in its place the No Action Alternative. However, a compromise based on information in the draft and technical reports lead me to suggest the following:

COMMENT LETTER 122

2

MORMON MOUNTAINS - (0161) - WILDERNESS ACCENT ALTERNATIVE
This choice would preserve wilderness values. Habitat would be protected and excluding the bajadas - as suggested on page 4-40 of the draft - would eliminated manageability problems related to ORV use. As for minerals I agree with Bureau of Land Management's (BLM) Wilderness Accent Alternative choice, page 4-40. More on this at the end of the presentation.

SOUTH PAHROCK - (0132) - PREFERRED ALTERNATIVE
This area is an outstanding wilderness area and close to Las Vegas (100 miles distant). Manageability would not be a problem because of the terrain. Wildlife habitat would be preserved.

CLOVER MOUNTAINS - (0139) - WILDERNESS ACCENT ALTERNATIVE
I agree with the Sierra Club's slight enlargement of the boundary of this WSA. This offers a unique opportunity to preserve the entire Cottonwood Canyon drainage basin.

MEADOW VALLEY RANGE - (0156) - WILDERNESS ACCENT ALTERNATIVE
This choice includes the bajada. Bajadas are generally excluded because of manageability problems. However, including this bajada in this WSA enhances the area. Wildlife, especially bighorn sheep, would benefit.

DELMAR MOUNTAINS - (0177) - WILDERNESS ACCENT ALTERNATIVE
This choice would be beneficial to wildlife habitat, in particular deer and bighorn sheep. Manageability would be maintained by excluding the bajada as described in the draft page 4-38.

The Classification of Minerals Potential and The Explanation of Mineral Groups used by the BLM is a fair and objective classification method. Relative ranking can be used to judge mineral deposits and oil or gas potential along with such deposits in other localities, states, and countries without arbitrary designation. Methods based on inferred occurances would eliminate areas unneccessarily. Unless there is definite evidence of, or proven need for, minerals and/or oil and gas these WSA's should be classified using the BLM method. I hope future WSA impact statements will use this same method.

Thank you for taking the time to consider my views.

Sincerely,

Becky Parr

Becky Parr

COMMENT LETTER 123

1-7-85

Mr. Frank Maxwell
Wilderness Team Leader - BLM
Las Vegas, NV

Re: Wilderness Designation - Caliente Resource Area

Dear Mr. Maxwell,

I wish to express my views on the following areas:

Mormon Mountains - Designate 123,132 acres as wilderness. This area will protect crucial habitat for desert tortoise, quail, mule deer, and desert bighorn. BLM's recommendation cuts across the area in a capricious manner and 23,690 acres is unacceptable.

Meadow Valley Range - Designate 166,500 acres as wilderness. The huge bajada extending from the mountain ridge should be included.

Clover Mountains - Designate 88,000 acres as wilderness. The entire Cottonwood Canyon watershed should be included.

COMMENT LETTER 123

②

Delamar Mountains - Designate 102,490 acres as wilderness. This immense plateau should be given BLM wilderness designation.

South Pahrock Range - Designate 28,395 acres as wilderness. The BLM designation for this rugged area is adequate.

Thank you for your attention to my feelings on these natural areas. Wilderness designation will protect the wildlife habitat and recreational opportunities that are necessory in our country today.

D Mark Parr
513 Branch Hill-Loveland Road
Loveland, Ohio 45140

COMMENT LETTER 124

4395 Bridle Way
Reno, Nevada, 89509
January 7, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management

Dear Mr. Maxwell:

I want to strongly endorse the wilderness recommendations in the Caliente Resource Area of Lincoln County. The 5 million acres that you suggest would be a good beginning, there are many sites in the Reno area that are also excellent possibilities. Nevada really lags behind in the area of wilderness conservation, so I am glad you are beginning what I hope will be an on-going process.

I want to support the proposals which include: 123,132 acres in the Mormon Mts, 166,500 acres in the Meadow Valley Range, 88,000 acres in the Clover Mts, 102,490 acres in the Delamar Mts. and 28,395 acres in the South Pahrock Range.

Wilderness designation for these areas is the best way to protect the natural values, wildlife habitat and recreational opportunities, so that there will be something left for future generations. I think

(over)

COMMENT LETTER 124

it is frightening to see how fast land is being gobbled up by subdivisions, shopping centers and urban development in general.

Please do protect these lands.

Sincerely yours,
J.M. peacock

COMMENT LETTER 125

1/7/84

Dear Frank Maxwell [redacted]

I support the proposals for the five WSA, and I feel it is important that as much acreage as possible should be designated as wilderness areas. Wilderness designation is the best way to protect the natural values, wildlife habitat & recreational opportunities of these lands.

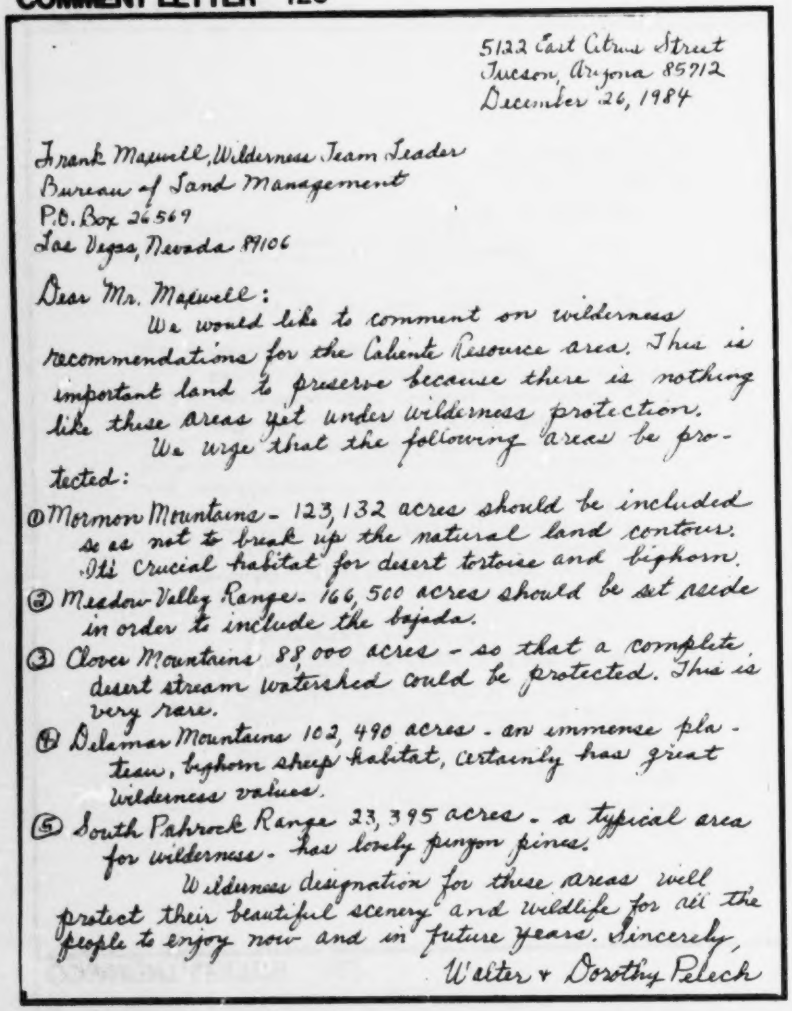
I feel that these acreages are important:

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 58,000 acres
Delamar Mountains -- 102,480 acres
South Pahroc Range -- 25,395 acres.

Sincerely,
Tanya Peacock

[redacted]

COMMENT LETTER 126



5122 East Citrus Street
Tucson, Arizona 85712
December 26, 1984

Frank Maxwell, Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

We would like to comment on wilderness recommendations for the Caliente Resource area. This is important land to preserve because there is nothing like these areas yet under wilderness protection.

We urge that the following areas be protected:

① Mormon Mountains - 123,132 acres should be included so as not to break up the natural land contour. It's crucial habitat for desert tortoise and bighorn.

② Meadow Valley Range - 166,500 acres should be set aside in order to include the bajada.

③ Clover Mountains 88,000 acres - so that a complete desert stream watershed could be protected. This is very rare.

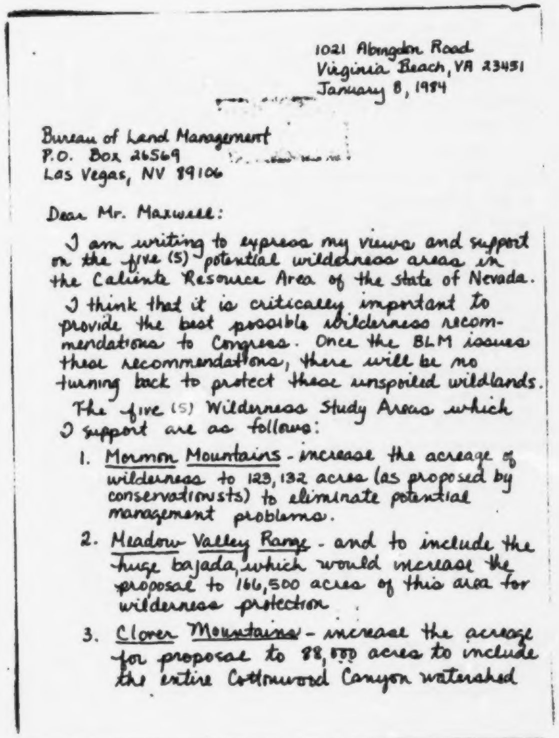
④ Delamar Mountains 102,490 acres - an immense plateau, bighorn sheep habitat, certainly has great wilderness values.

⑤ South Pahrock Range 23,395 acres - a typical area for wilderness - has lovely pinyon pines.

Wilderness designation for these areas will protect their beautiful scenery and wildlife for all the people to enjoy now and in future years. Sincerely,

Walter + Dorothy Pelech

COMMENT LETTER 127



1021 Abingdon Road
Virginia Beach, VA 23451
January 8, 1984

Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

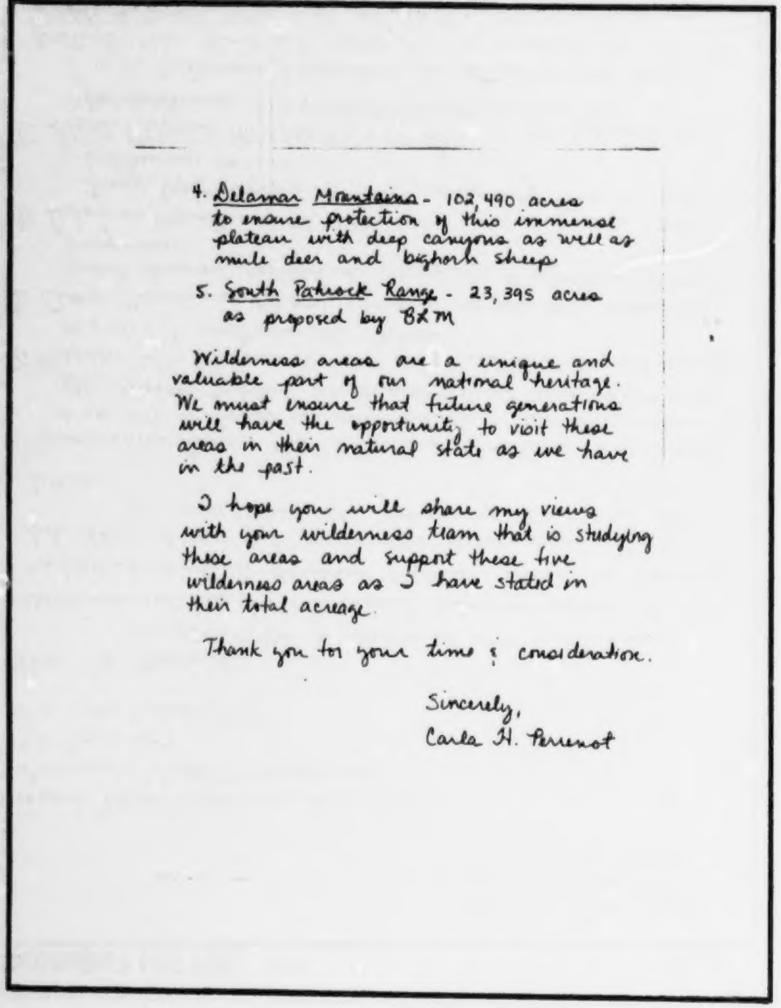
I am writing to express my views and support on the five (5) potential wilderness areas in the Caliente Resource Area of the state of Nevada.

I think that it is critically important to provide the best possible wilderness recommendations to Congress. Once the BLM issues these recommendations, there will be no turning back to protect these unspoiled wildlands.

The five (5) Wilderness Study Areas which I support are as follows:

1. Mormon Mountains - increase the acreage of wilderness to 123,132 acres (as proposed by conservationists) to eliminate potential management problems.
2. Meadow Valley Range - and to include the huge bajada, which would increase the proposal to 166,500 acres of this area for wilderness protection.
3. Clover Mountains - increase the acreage for proposal to 88,000 acres to include the entire Cottonwood Canyon watershed

COMMENT LETTER 127



4. Delamar Mountains - 102,490 acres to ensure protection of this immense plateau with deep canyons as well as mule deer and bighorn sheep
5. South Pahrock Range - 23,395 acres as proposed by BLM

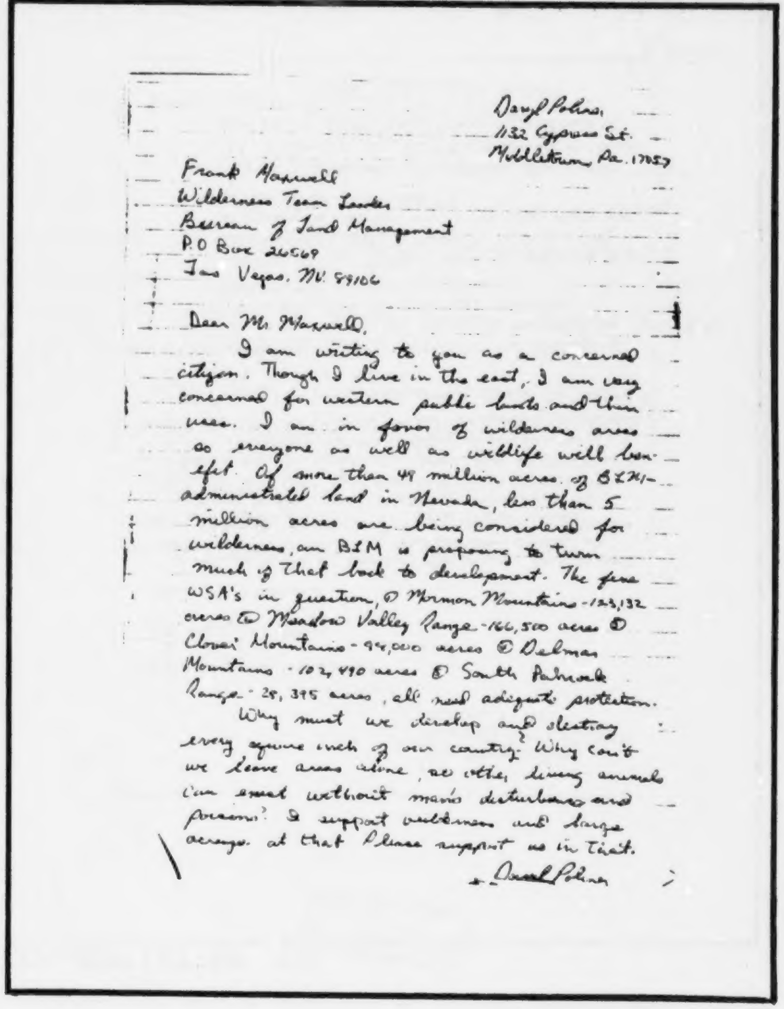
Wilderness areas are a unique and valuable part of our national heritage. We must ensure that future generations will have the opportunity to visit these areas in their natural state as we have in the past.

I hope you will share my views with your wilderness team that is studying these areas and support these five wilderness areas as I have stated in their total acreage.

Thank you for your time & consideration.

Sincerely,
Carla H. Perrenot

COMMENT LETTER 128



Daryl Polins,
1132 Cypress St.
Middletown, Pa. 17057

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O Box 26569
Las Vegas, NV. 89106

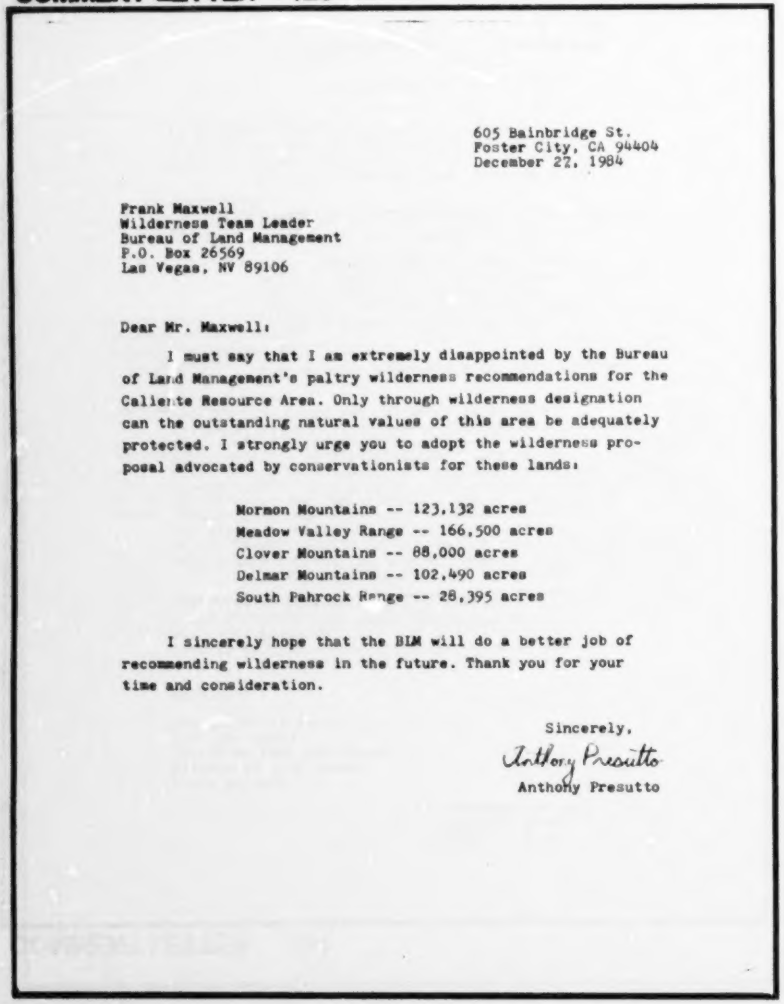
Dear Mr Maxwell,

I am writing to you as a concerned citizen. Though I live in the east, I am very concerned for western public lands and their uses. I am in favor of wilderness areas so everyone as well as wildlife will benefit. Of more than 49 million acres of BLM-administrated land in Nevada, less than 5 million acres are being considered for wilderness, and BLM is proposing to turn much of that back to development. The five WSA's in question, ① Mormon Mountains - 123,132 acres ② Meadow Valley Range - 166,500 acres ③ Clover Mountains - 94,000 acres ④ Delamar Mountains - 102,490 acres ⑤ South Pahrock Range - 28,395 acres, all need adequate protection.

Why must we develop and destroy every square inch of our country? Why can't we leave areas alone, so other living animals can exist without man's disturbance and poisons? I support wilderness and large acreage at that. Please support us in that.

Daryl Polins

COMMENT LETTER 129



605 Bainbridge St.
Foster City, CA 94404
December 27, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

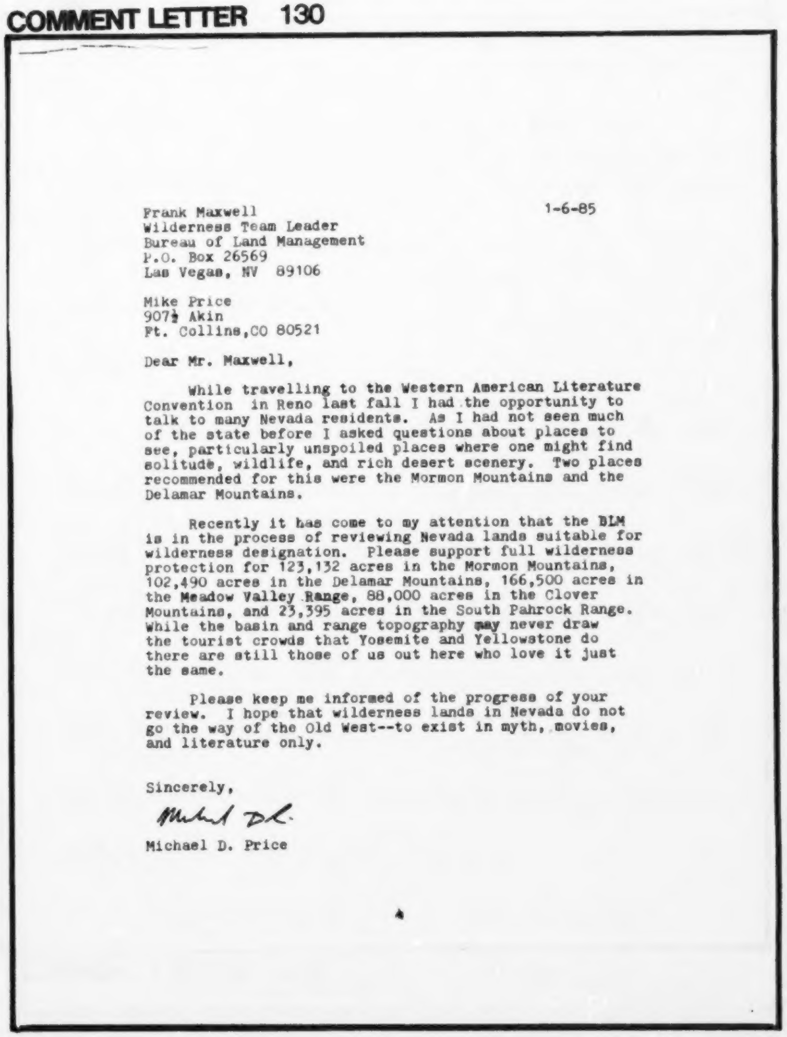
I must say that I am extremely disappointed by the Bureau of Land Management's paltry wilderness recommendations for the Caliente Resource Area. Only through wilderness designation can the outstanding natural values of this area be adequately protected. I strongly urge you to adopt the wilderness proposal advocated by conservationists for these lands:

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 88,000 acres
Delmar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

I sincerely hope that the BLM will do a better job of recommending wilderness in the future. Thank you for your time and consideration.

Sincerely,
Anthony Presutto
Anthony Presutto

COMMENT LETTER 130



Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

1-6-85

Mike Price
907½ Akin
Ft. Collins,CO 80521

Dear Mr. Maxwell,

While travelling to the Western American Literature Convention in Reno last fall I had the opportunity to talk to many Nevada residents. As I had not seen much of the state before I asked questions about places to see, particularly unspoiled places where one might find solitude, wildlife, and rich desert scenery. Two places recommended for this were the Mormon Mountains and the Delamar Mountains.

Recently it has come to my attention that the BLM is in the process of reviewing Nevada lands suitable for wilderness designation. Please support full wilderness protection for 123,132 acres in the Mormon Mountains, 102,490 acres in the Delamar Mountains, 166,500 acres in the Meadow Valley Range, 88,000 acres in the Clover Mountains, and 23,395 acres in the South Pahrock Range. While the basin and range topography may never draw the tourist crowds that Yosemite and Yellowstone do there are still those of us out here who love it just the same.

Please keep me informed of the progress of your review. I hope that wilderness lands in Nevada do not go the way of the Old West--to exist in myth, movies, and literature only.

Sincerely,

Michael D. Price

COMMENT LETTER 131

P.O. Box 846
Minden, Nevada
December 28, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Sir:

I am shocked to learn that, of the more than 49 million acres of BLM-administered land in my State of Nevada, less than 5 million acres are being considered for wilderness and that BLM is proposing to turn much of that back to development.

First, formerly from the East Coast, I now have a deep love of the desert. Under a high noon sun it speaks validly of the harsher aspects of life, but not as a wasteland. Later the sun slants, huge shapes stand out, varied colors appear among the tawny, white and black, cumulus clouds float making shadow designs on the hills - a gripping, commanding stark beauty, a glory saying something about life and Beyond. A society also needs what is not technologically useful to preserve its spirit of concerned goodwill and to keep the U.S. culture from sinking into greed and the desecration of all natural values.

I am greatly concerned about the following Wilderness Study Areas:

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 88,000 acres
Delamar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

All this acreage should be designated wilderness as there is nothing like these areas under wilderness protection.

Wilderness designation is the best way to preserve nature in all its variety, protect wildlife habitats and provide recreational opportunities of a certain type in our State of Nevada.

A Sincere Lover of The Desert,

Marilynne C. Humphrey

COMMENT LETTER 132

1312 Apache
Richardson, Tx. 75080
Dec. 29, 1984

Frank Maxwell
BLM
P.O. Box 26569
Las Vegas NV 89106

Dear Mr. Maxwell,

I support wilderness designation for the following WSAs in the acreages given:

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

Wilderness designation is the best way to protect the natural values, recreational opportunities and wildlife habitat of these lands.

Sincerely,

COMMENT LETTER 133

Reno, Nev. 89503
December 26, 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nev. 89106

Dear Mr. Maxwell:

I am writing in regard to the five wilderness study areas in the Caliente Resource Area, to support their official designation as wilderness. I strongly believe that a wilderness designation for all five areas is necessary to protect not only valuable wildlife habitat, but also recreational opportunities that may become increasingly rare as Nevada's population grows.

In accordance with the proposals made by local conservationists, I support the inclusion of 123,132 acres in the Mormon Mountains, 88,000 acres in the Clover Mountains, 23,395 acres in the South Pahrock Range, 166,500 acres in the Meadow Valley Range, and the creation of a 102,490 acre wilderness area in the Delamar Mountains. I hope that these acreages will be included in the final wilderness recommendations.

Sincerely,

C. E. Raymond

C. E. Raymond

COMMENT LETTER 134

January 1985

Ron Raz
3110 Kingsbridge Terr. #6c
Bronx, N.Y. 10463

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

Now living in the urban sprawl along the once beautiful Hudson River, I beg you, please don't let greed also set the precedent with the opening up of the 49 million acres of BLM-administered land in Nevada to complete exploitation by developers. This is not an issue that can be compromised and I strongly urge you to aggressively encourage the recommendation for wilderness protection the uniquely qualified areas:

Mormon Mountains - - - 123,132 acres
Meadow Valley Range - - - 166,500 acres

COMMENT LETTER 134

Clover Mountains --- 88,000 acres

Delamar Mountains --- 102,490 acres

South Pahrock Range --- 28,395 acres

It is pertty obvious to anyone who has at all studied these unspoiled (geographically and ecologically) wildlands that they deserve protection. I know, I grew up in the west and spent many a years exploring this region.

Establishing these wilderness areas is our responsibility and we must act quickly and firmly or we will fail to grasp this opportunity, the blame will then be with us not the developers.

Time is of the essence and your leadership in this matter is vital and profound since you hold a historical responsibility for the sake of all the generations of life yet to come.

Sincerely, Ron Raz

COMMENT LETTER 135

P.O. Box 162
Carson City, Nevada 89702
December 21, 1984

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

We support wilderness designation of all qualifying wild lands administered by the Bureau of Land Management in Nevada.

We urge you to recommend maximum acreages for preservation in the Caliente Resource Area now under consideration, as follows:

Mormon Mountains	123, 132 acres
Meadow Valley Range	166, 500 "
Clover Mountains	88, 000 "
Delamar Mountains	102, 490 "
South Pahrock Range	28, 395 "

Norman Reimers
Norman Reimers

Eleanor Reimers

COMMENT LETTER 136

Vikki and Danny Riddle
5824 Velma Avenue
Las Vegas, Nevada 89108

December 26, 1984

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Re: Wilderness Areas in Nevada

Dear Mr. Maxwell:

We understand that the BLM is reviewing the Caliente Resource Area of Lincoln County for wilderness designation. The intent of our letter is to encourage your agency to maximize the wilderness areas in Nevada.

We agree with other conservationists proposals to designate the following areas as wilderness and allocate the acreage accordingly:

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

We are very active in the great outdoor expenses of Nevada, particularly the northeastern section. In all of our out-of-state travels, we have never seen anything quite like this area of Nevada. It has it's own unique topography and solitude unmatched in any other state.

Our wish is to have these lands protected because of their unique beauty, wildlife, and recreational opportunity to be enjoyed by all. We feel we already have enough other area to be developed and used up by other special interests.

The size of the wilderness is very important to help it retain wilderness qualities. There are so many places already accessible now via 4-wheel drive or A.T.V. If some area is yet unspoiled, lets strive to keep it that way.

Each September since 1979 we have spent 10 days or more in the Jarbidge Wilderness of Nevada. We truly appreciate the opportunity to walk a few miles and enjoy the untouched beauty, view the wildlife, and feel the outstanding solitude we require to refuel us for our city life.

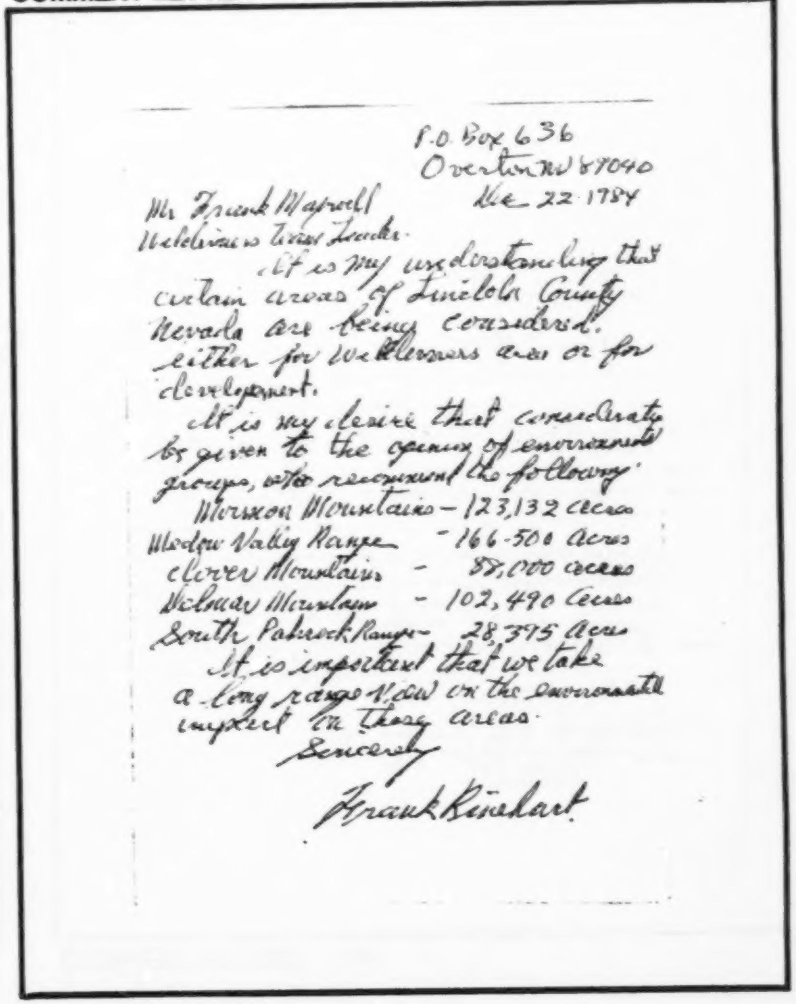
Please consider these proposed areas very carefully.

Sincerely,

Vikki Riddle

Danny M. Riddle

COMMENT LETTER 137



P.O. Box 636
Overton NV 89040
Dec 22 1984

Mr Frank Maxwell
Wilderness Team Leader.

It is my understanding that certain areas of Lincoln County Nevada are being considered. either for Wilderness area or for development.

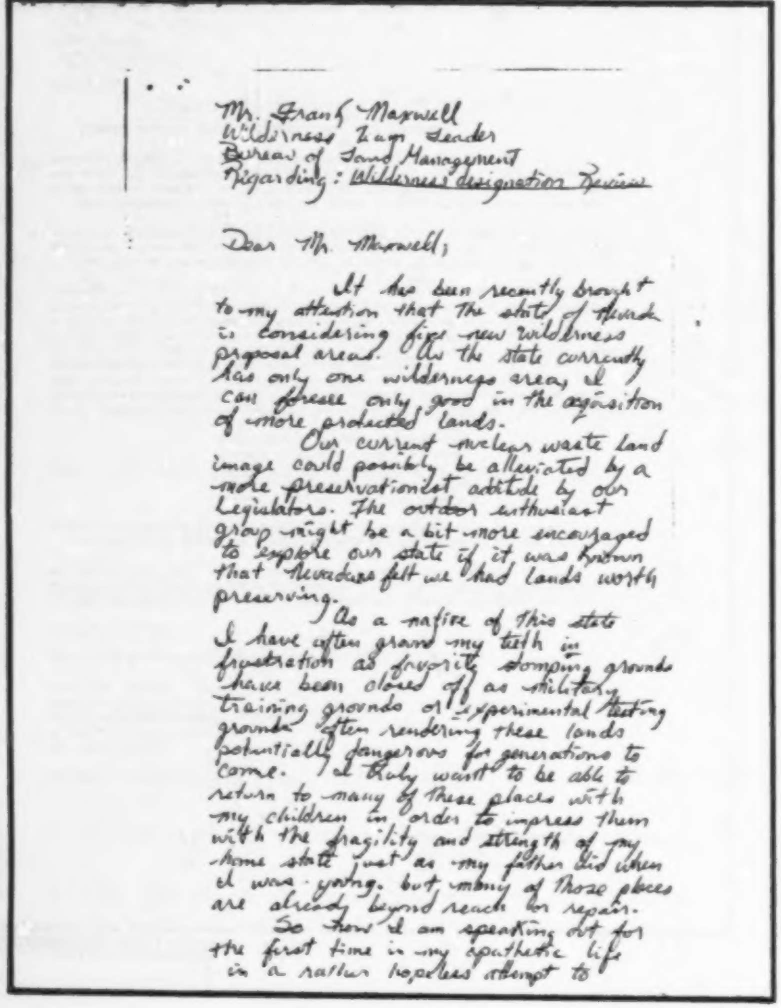
It is my desire that consideration be given to the opinion of environmental groups, who recommend the following:

Mormon Mountains – 123,132 acres
Meadow Valley Range – 166-500 acres
Clover Mountains – 88,000 acres
Delmar Mountain – 102,490 acres
South Pahrock Range – 28,395 acres

It is important that we take a long range view on the environmental impact on these areas.

Sincerely

Frank Rinehart



Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
Regarding: Wilderness designation Review

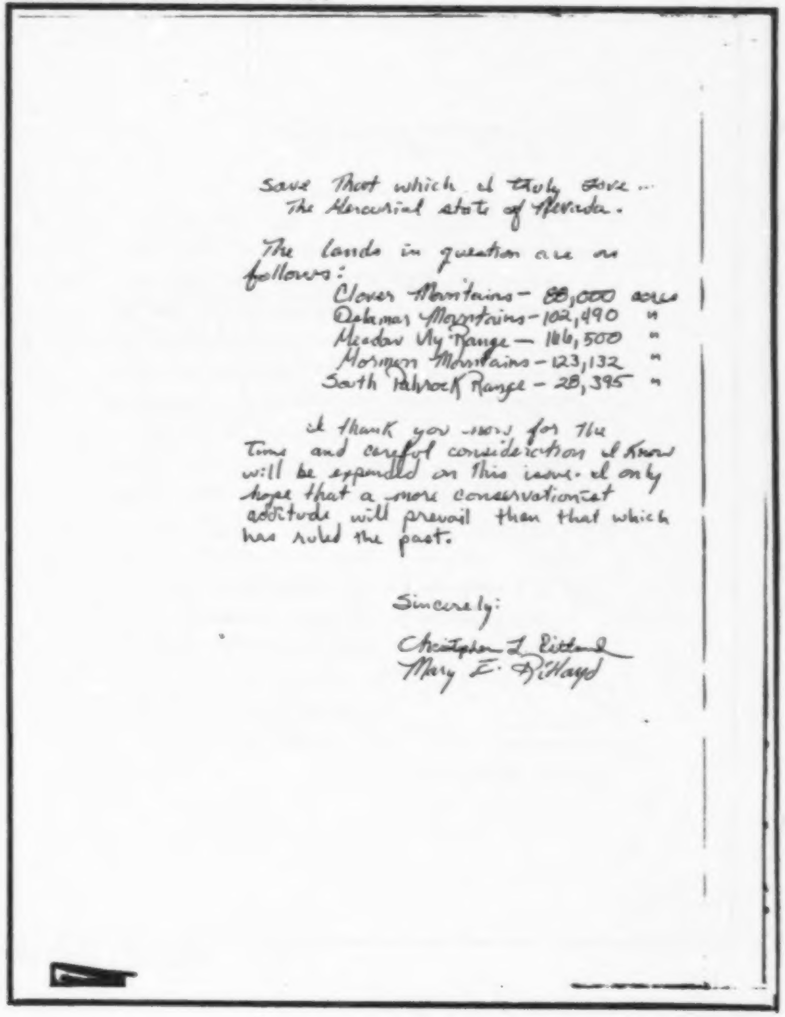
Dear Mr. Maxwell;

It has been recently brought to my attention that the state of Nevada is considering five new wilderness proposal areas. As the state currently has only one wilderness area, I can foresee only good in the acquisition of more protected lands.

Our current nuclear waste land image could possibly be alleviated by a more preservationist attitude by our Legislators. The outdoor enthusiast group might be a bit more encouraged to explore our state if it was known that Nevadans felt we had lands worth preserving.

As a native of this state I have often ground my teeth in frustration as favorite stomping grounds have been closed off as military training grounds or experimental testing grounds often rendering these lands potentially dangerous for generations to come. I truly want to be able to return to many of these places with my children in order to impress them with the fragility and strength of my home state just as my father did when I was young. but many of those places are already beyond reach or repair.

So now I am speaking out for the first time in my apathetic life in a rather hopeless attempt to



save that which I truly love...
The Mercurial state of Nevada.

The lands in question are as follows:

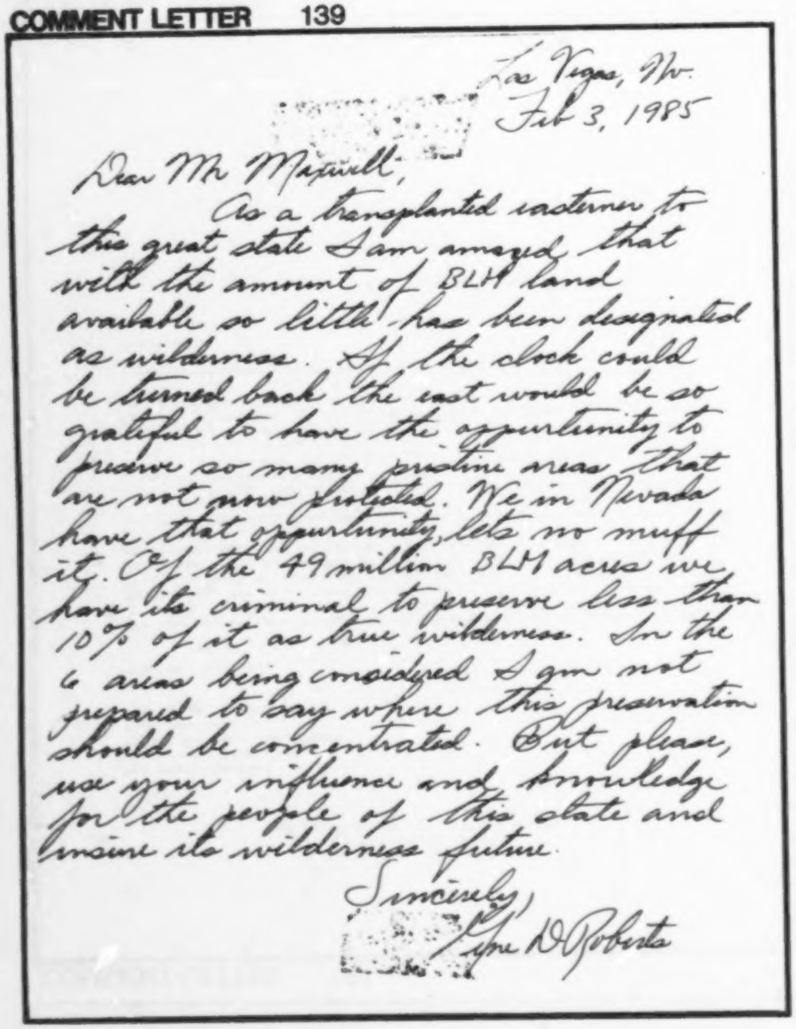
Clover Mountains – 88,000 acres
Delamar Mountains – 102,490 "
Meadow Valley Range – 116,500 "
Mormon Mountains – 123,132 "
South Pahroc Range – 28,395 "

I thank you now for the time and careful consideration I know will be expended on this issue. I only hope that a more conservationist attitude will prevail than that which has ruled the past.

Sincerely:

Christopher L. Rittard
Mary E. Rittard

COMMENT LETTER 139



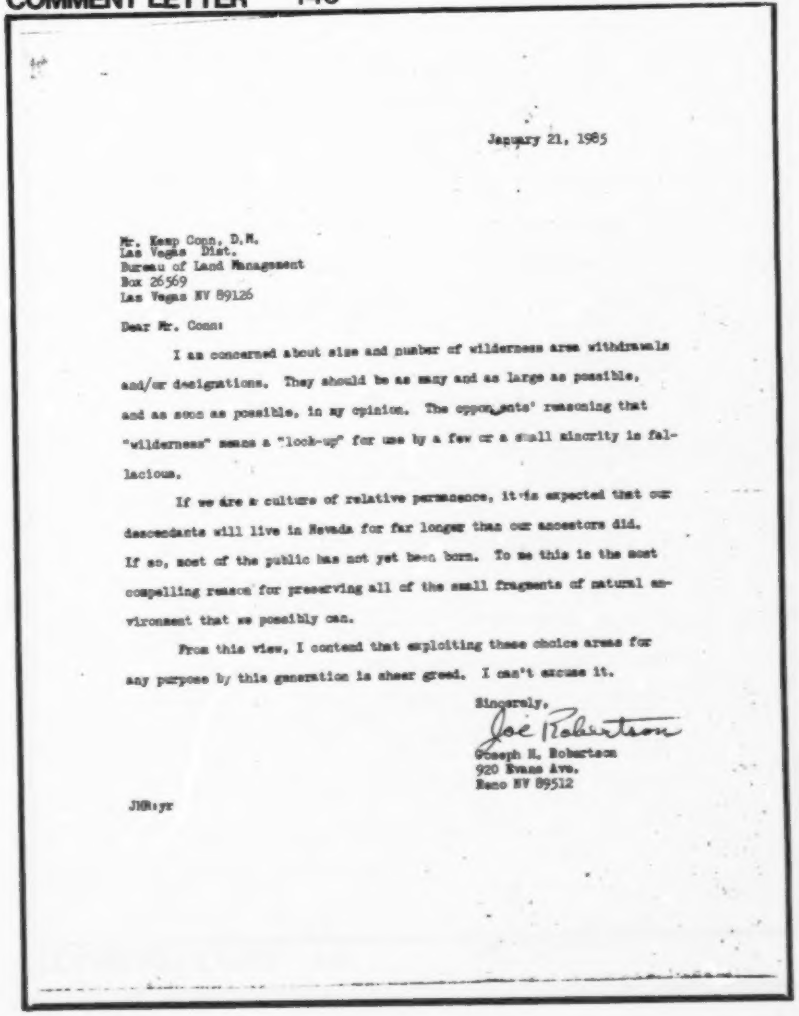
Las Vegas, Nv.
Feb 3, 1985

Dear Mr Maxwell,

As a transplanted easterner to this great state I am amazed that with the amount of BLM land available so little has been designated as wilderness. If the clock could be turned back the east would be so grateful to have the oppurtunity to preserve so many pristine areas that are not now protected. We in Nevada have that oppurtunity, lets no muff it. Of the 49 million BLM acres we have its criminal to preserve less than 10% of it as true wilderness. In the 6 areas being considered I am not prepared to say where this preservation should be concentrated. But please, use your influence and knowledge for the people of this state and insure its wilderness future.

Sincerely,
Gene D Roberts

COMMENT LETTER 140



January 21, 1985

Mr. Kemp Conn, D.M.
Las Vegas Dist.
Bureau of Land Management
Box 26569
Las Vegas NV 89126

Dear Mr. Conn:

I am concerned about size and number of wilderness area withdrawals and/or designations. They should be as many and as large as possible, and as soon as possible, in my opinion. The opponents' reasoning that "wilderness" means a "lock-up" for use by a few or a small minority is fallacious.

If we are a culture of relative permanence, it is expected that our descendants will live in Nevada for far longer than our ancestors did. If so, most of the public has not yet been born. To me this is the most compelling reason for preserving all of the small fragments of natural environment that we possibly can.

From this view, I contend that exploiting these choice areas for any purpose by this generation is sheer greed. I can't excuse it.

Sincerely,
Joe Robertson
Joseph H. Robertson
920 Evans Ave.
Reno NV 89512

JHR:yr

COMMENT LETTER 141

CHARLES A. RODEWALD
1347 WOODSIDE DRIVE
SAN LUIS OBISPO, CALIFORNIA 93401

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

The Bureau of Land Management administers about 49 million acres of land in Nevada. About 10-percent of that land has been considered for wilderness designation. The BLM is considering giving up much of that land for development. I am writing you to encourage you to reconsider that position. I am especially concerned about the following Wilderness Study Areas:

Mormon Mountains	123,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delamar Mountains	102,490 acres
South Pahrock Range	28,395 acres

Each of the above areas has its own unique wilderness values. Careful attention to those values should be made prior to any change in the current WSA designation for the areas.

I appreciate your thoughtfulness in this regard.

Thank you.

Sincerely yours,

Charles A. Rodewald

COMMENT LETTER 142

12-21-84

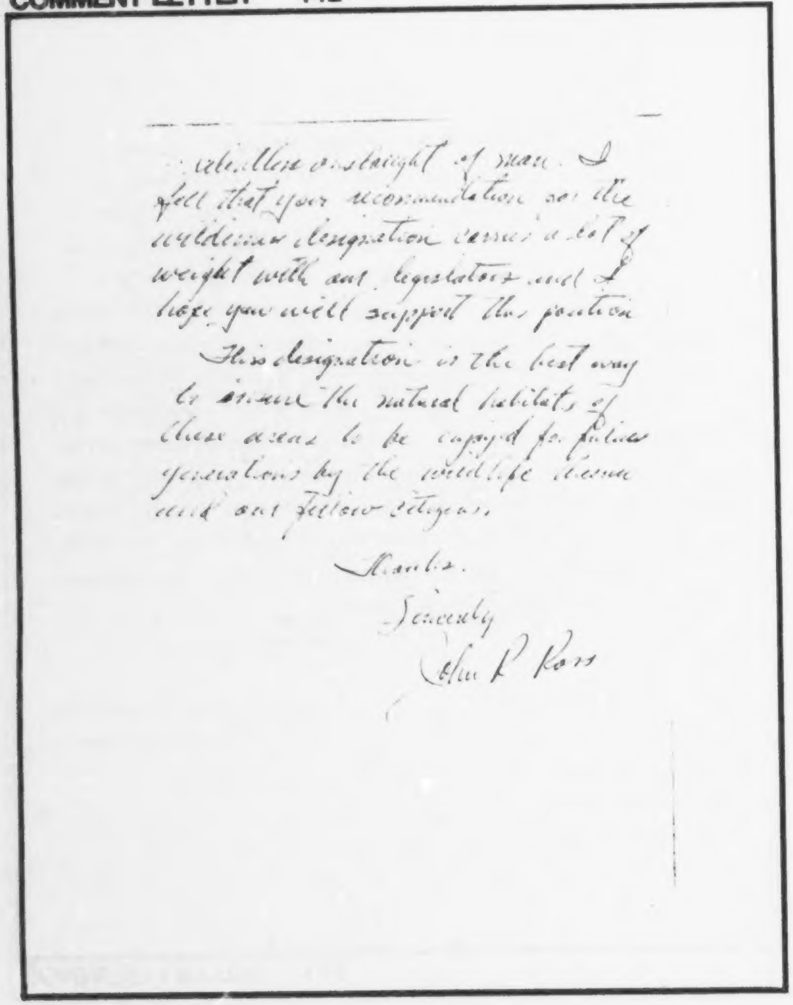
Dear Mr. Maxwell & BLM personnel

It has come to my attention, being a member of the Sierra Club that the BLM is going to return much of Nevada's public lands back to developmental use. I am urging you and the BLM to support the Wilderness designation for the following:

Mormon Mountains	123,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delamar Mountains	102,490 acres
South Pahrock Range	28,395 acres

Nevada is a beautiful example of primeval landscapes, still untouched for the most part by the

COMMENT LETTER 142



relentless onslaught of man. I feel that your recommendation on the wilderness designation carries a lot of weight with our legislators and I hope you will support this position.

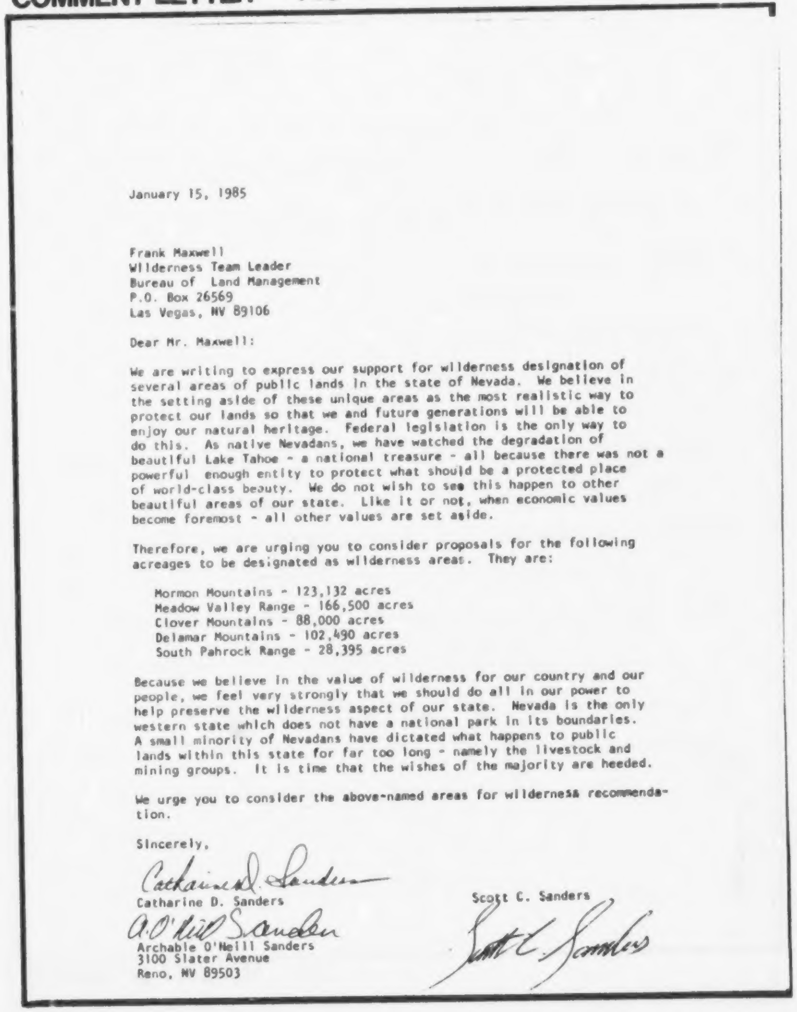
This designation is the best way to insure the natural habitats of these areas to be enjoyed for future generations by the wildlife there and our fellow citizens.

Thanks.

Sincerely

John P Ross

COMMENT LETTER 143



January 15, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

We are writing to express our support for wilderness designation of several areas of public lands in the state of Nevada. We believe in the setting aside of these unique areas as the most realistic way to protect our lands so that we and future generations will be able to enjoy our natural heritage. Federal legislation is the only way to do this. As native Nevadans, we have watched the degradation of beautiful Lake Tahoe - a national treasure - all because there was not a powerful enough entity to protect what should be a protected place of world-class beauty. We do not wish to see this happen to other beautiful areas of our state. Like it or not, when economic values become foremost - all other values are set aside.

Therefore, we are urging you to consider proposals for the following acreages to be designated as wilderness areas. They are:

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

Because we believe in the value of wilderness for our country and our people, we feel very strongly that we should do all in our power to help preserve the wilderness aspect of our state. Nevada is the only western state which does not have a national park in its boundaries. A small minority of Nevadans have dictated what happens to public lands within this state for far too long - namely the livestock and mining groups. It is time that the wishes of the majority are heeded.

We urge you to consider the above-named areas for wilderness recommendation.

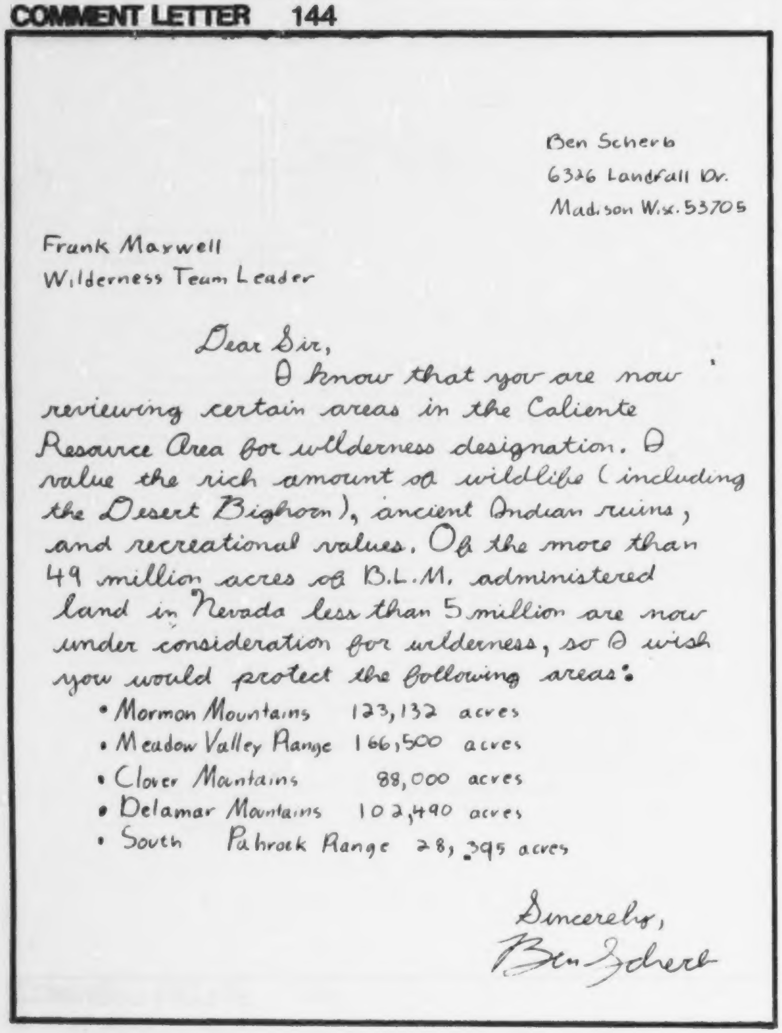
Sincerely,

Catharine D. Sanders
Catharine D. Sanders

A. O'Neill Sanders
Archable O'Neill Sanders
3100 Slater Avenue
Reno, NV 89503

Scott C. Sanders
Scott C. Sanders

COMMENT LETTER 144



Ben Scherb
6326 Landfall Dr.
Madison Wis. 53705

Frank Maxwell
Wilderness Team Leader

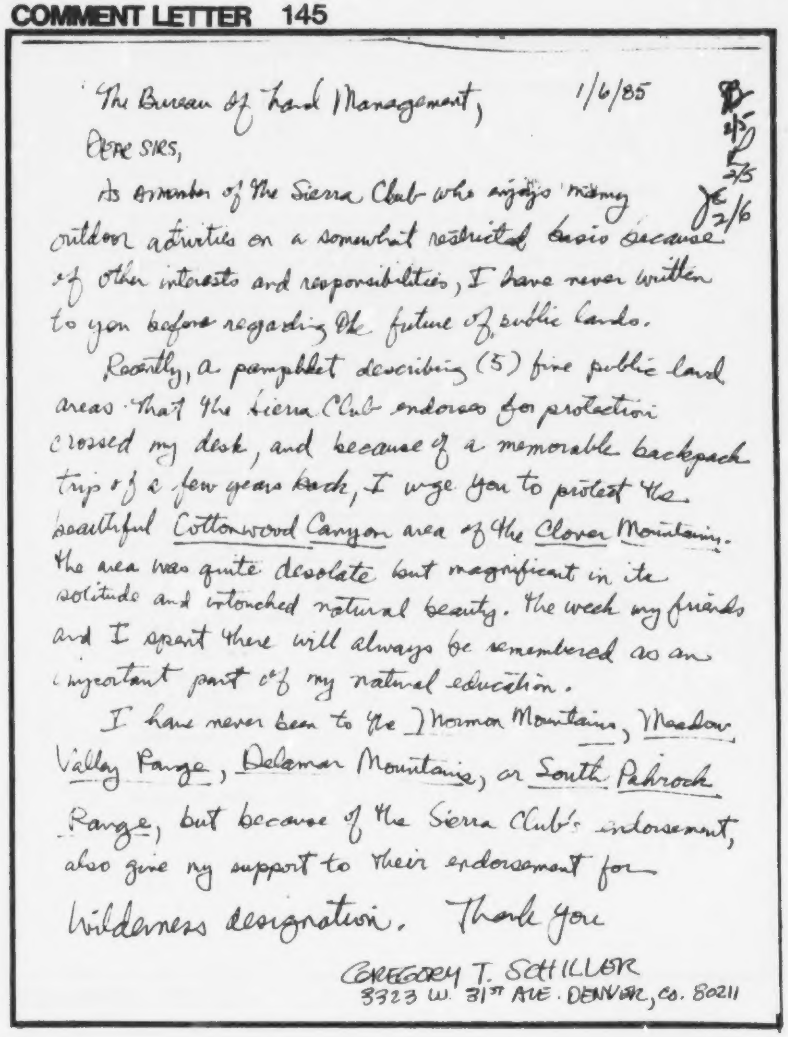
Dear Sir,

I know that you are now reviewing certain areas in the Caliente Resource Area for wilderness designation. I value the rich amount of wildlife (including the Desert Bighorn), ancient Indian ruins, and recreational values. Of the more than 49 million acres of B.L.M. administered land in Nevada less than 5 million are now under consideration for wilderness, so I wish you would protect the following areas:

• Mormon Mountains	123,132 acres
• Meadow Valley Range	166,500 acres
• Clover Mountains	88,000 acres
• Delamar Mountains	102,490 acres
• South Pahrock Range	28,395 acres

Sincerely,
Ben Scherb

COMMENT LETTER 145



The Bureau of Land Management, 1/6/85

2/5
2/5
JE 2/6

Dear Sirs,

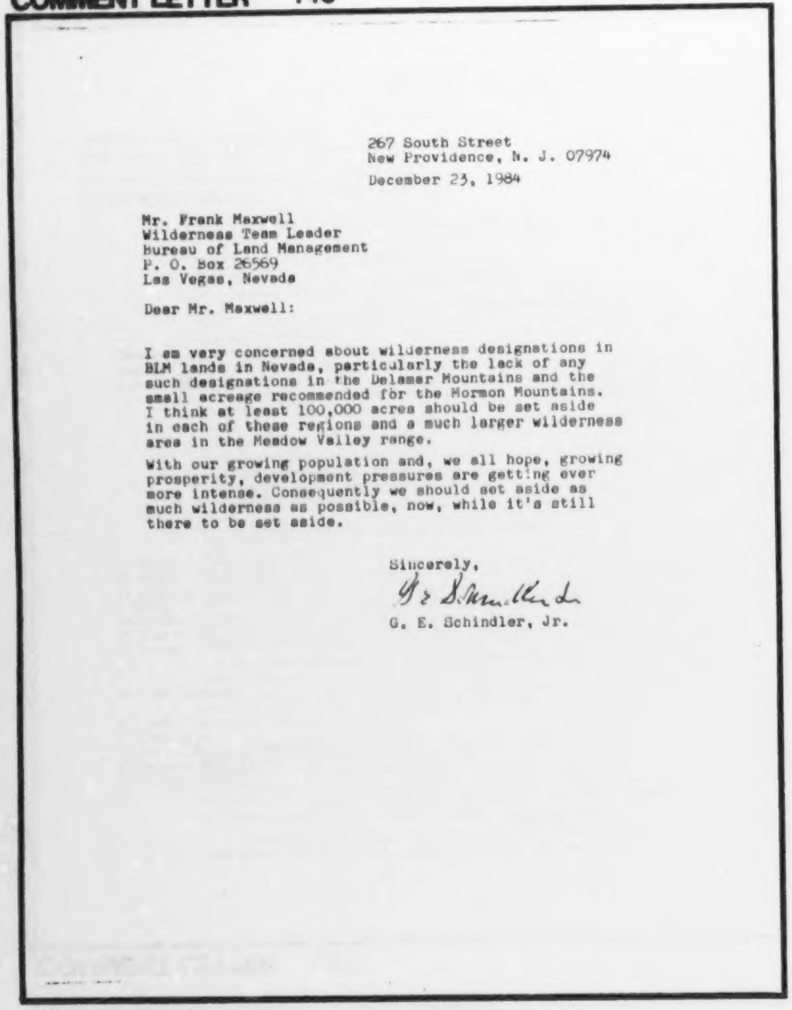
As a member of the Sierra Club who enjoys many outdoor activities on a somewhat restricted basis because of other interests and responsibilities, I have never written to you before regarding the future of public lands.

Recently, a pamphlet describing (5) fine public land areas that the Sierra Club endorses for protection crossed my desk, and because of a memorable backpack trip of a few years back, I urge you to protect the beautiful Cottonwood Canyon area of the Clover Mountains. The area was quite desolate but magnificent in its solitude and untouched natural beauty. The week my friends and I spent there will always be remembered as an important part of my natural education.

I have never been to the Mormon Mountains, Meadow Valley Range, Delamar Mountains, or South Pahrock Range, but because of the Sierra Club's endorsement, also give my support to their endorsement for wilderness designation. Thank you

GREGORY T. SCHILLER
3323 W. 31ST AVE. DENVER, CO. 80211

COMMENT LETTER 146



267 South Street
New Providence, N. J. 07974
December 23, 1984

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P. O. Box 26569
Las Vegas, Nevada

Dear Mr. Maxwell:

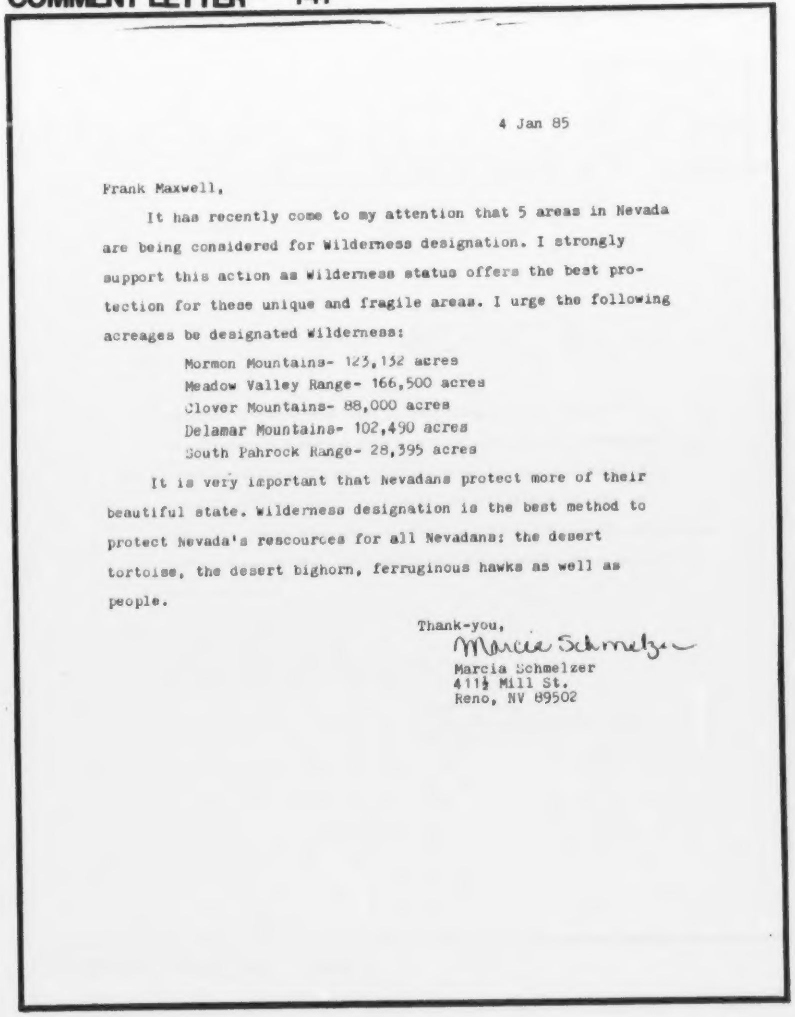
I am very concerned about wilderness designations in BLM lands in Nevada, particularly the lack of any such designations in the Delamar Mountains and the small acreage recommended for the Mormon Mountains. I think at least 100,000 acres should be set aside in each of these regions and a much larger wilderness area in the Meadow Valley range.

With our growing population and, we all hope, growing prosperity, development pressures are getting ever more intense. Consequently we should set aside as much wilderness as possible, now, while it's still there to be set aside.

Sincerely,

G. E. Schindler, Jr.

COMMENT LETTER 147



4 Jan 85

Frank Maxwell,

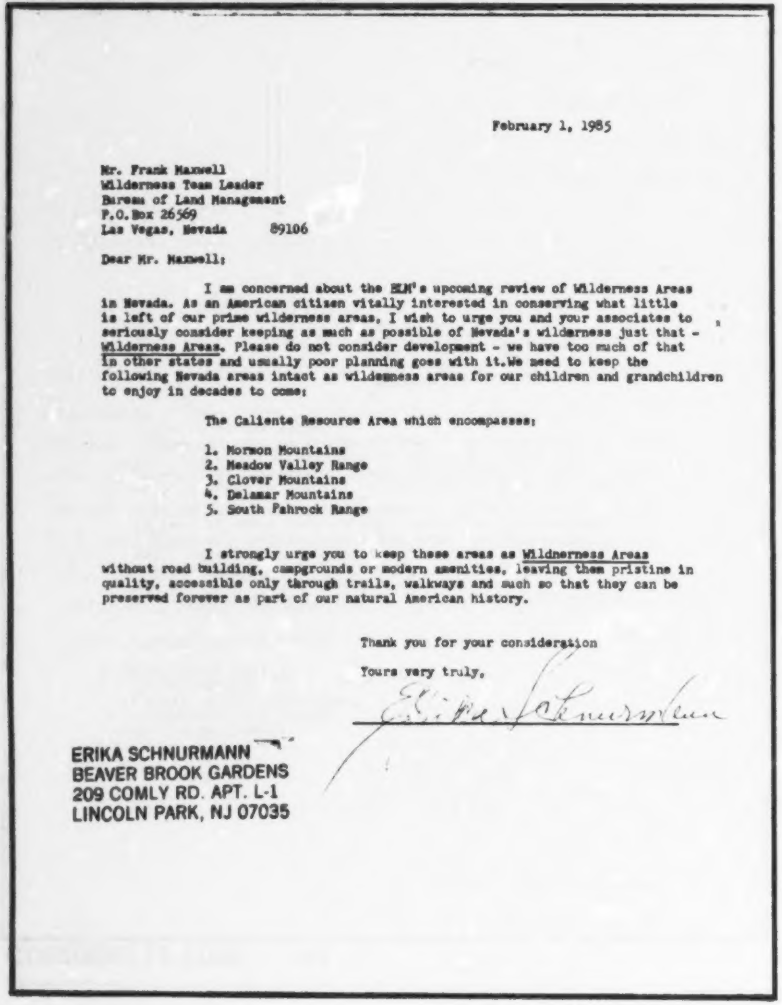
It has recently come to my attention that 5 areas in Nevada are being considered for Wilderness designation. I strongly support this action as Wilderness status offers the best protection for these unique and fragile areas. I urge the following acreages be designated Wilderness:

Mormon Mountains- 123,132 acres
Meadow Valley Range- 166,500 acres
Clover Mountains- 88,000 acres
Delamar Mountains- 102,490 acres
South Pahrock Range- 28,395 acres

It is very important that Nevadans protect more of their beautiful state. Wilderness designation is the best method to protect Nevada's rescources for all Nevadans: the desert tortoise, the desert bighorn, ferruginous hawks as well as people.

Thank-you,
Marcia Schmelzer
Marcia Schmelzer
411½ Mill St.
Reno, NV 89502

COMMENT LETTER 148



February 1, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O.Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell;

I am concerned about the BLM's upcoming review of Wilderness Areas in Nevada. As an American citizen vitally interested in conserving what little is left of our prime wilderness areas, I wish to urge you and your associates to seriously consider keeping as much as possible of Nevada's wilderness just that - Wilderness Areas. Please do not consider development - we have too much of that in other states and usually poor planning goes with it. We need to keep the following Nevada areas intact as wildesness areas for our children and grandchildren to enjoy in decades to come;

The Caliente Resource Area which encompasses;

1. Mormon Mountains
2. Meadow Valley Range
3. Clover Mountains
4. Delamar Mountains
5. South Pahrock Range

I strongly urge you to keep these areas as Wildnerness Areas without road building, campgrounds or modern amenities, leaving them pristine in quality, accessible only through trails, walkways and such so that they can be preserved forever as part of our natural American history.

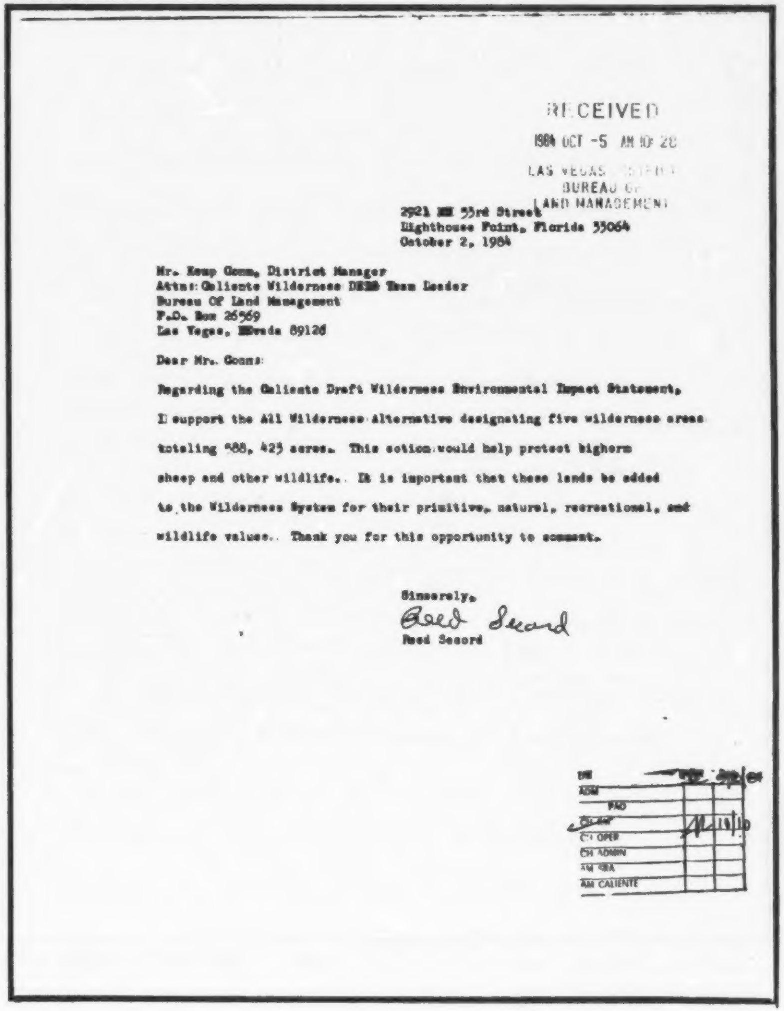
Thank you for your consideration

Yours very truly,

Erika Schnurmann

ERIKA SCHNURMANN
BEAVER BROOK GARDENS
209 COMLY RD. APT. L-1
LINCOLN PARK, NJ 07035

COMMENT LETTER 149



RECEIVED
1984 OCT -5 AM 10 28
LAS VEGAS DISTRICT
BUREAU OF
LAND MANAGEMENT

2921 NE 33rd Street
Lighthouse Point, Florida 33064
October 2, 1984

Mr. Kemp Conn, District Manager
Attn: Caliente Wilderness DEIS Team Leader
Bureau Of Land Management
P.O. Box 26569
Las Vegas, Nevada 89126

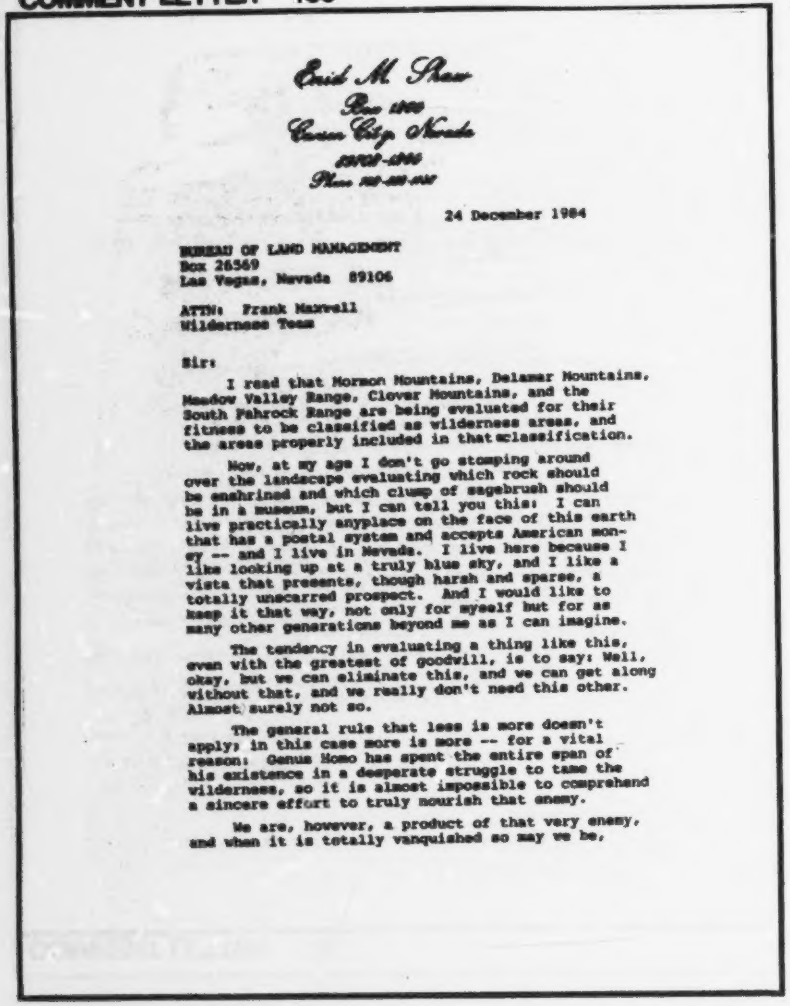
Dear Mr. Conn:

Regarding the Caliente Draft Wilderness Environmental Impact Statement, I support the All Wilderness Alternative designating five wilderness areas totaling 588, 423 acres. This action would help protect bighorn sheep and other wildlife. It is important that these lands be added to the Wilderness System for their primitive, natural, recreational, and wildlife values. Thank you for this opportunity to comment.

Sincerely,
Reed Secord
Reed Secord

DM
ASO
PAO
CH OPER
CH ADMIN
AM SBA
AM CALIENTE

COMMENT LETTER 150



Enid M. Shaw
Box [illegible]
Carson City, Nevada
[illegible]
Phone [illegible]

24 December 1984

BUREAU OF LAND MANAGEMENT
Box 26569
Las Vegas, Nevada 89106

ATTN: Frank Maxwell
Wilderness Team

Sir:

I read that Mormon Mountains, Delamar Mountains, Meadow Valley Range, Clover Mountains, and the South Pahrock Range are being evaluated for their fitness to be classified as wilderness areas, and the areas properly included in that classification.

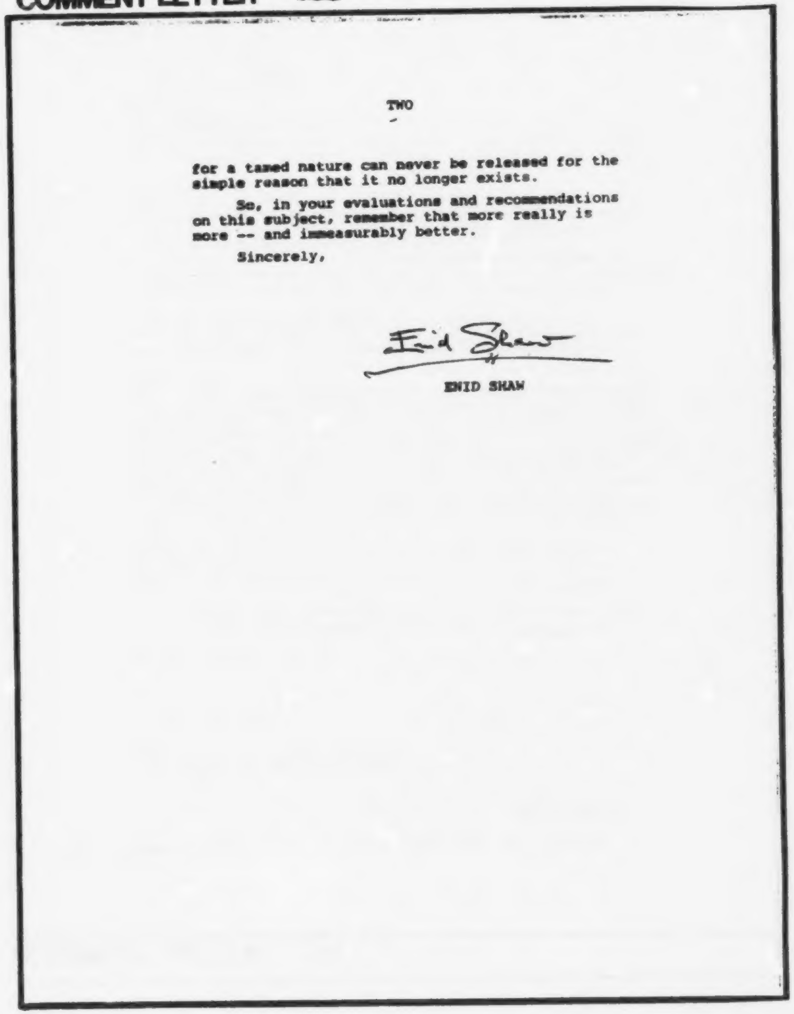
Now, at my age I don't go stomping around over the landscape evaluating which rock should be enshrined and which clump of sagebrush should be in a museum, but I can tell you this: I can live practically anyplace on the face of this earth that has a postal system and accepts American money -- and I live in Nevada. I live here because I like looking up at a truly blue sky, and I like a vista that presents, though harsh and sparse, a totally unscarred prospect. And I would like to keep it that way, not only for myself but for as many other generations beyond me as I can imagine.

The tendency in evaluating a thing like this, even with the greatest of goodwill, is to say: Well, okay, but we can eliminate this, and we can get along without that, and we really don't need this other. Almost surely not so.

The general rule that less is more doesn't apply; in this case more is more -- for a vital reason: Genus Homo has spent the entire span of his existence in a desperate struggle to tame the wilderness, so it is almost impossible to comprehend a sincere effort to truly nourish that enemy.

We are, however, a product of that very enemy, and when it is totally vanquished so may we be,

COMMENT LETTER 150



TWO

for a tamed nature can never be released for the simple reason that it no longer exists.

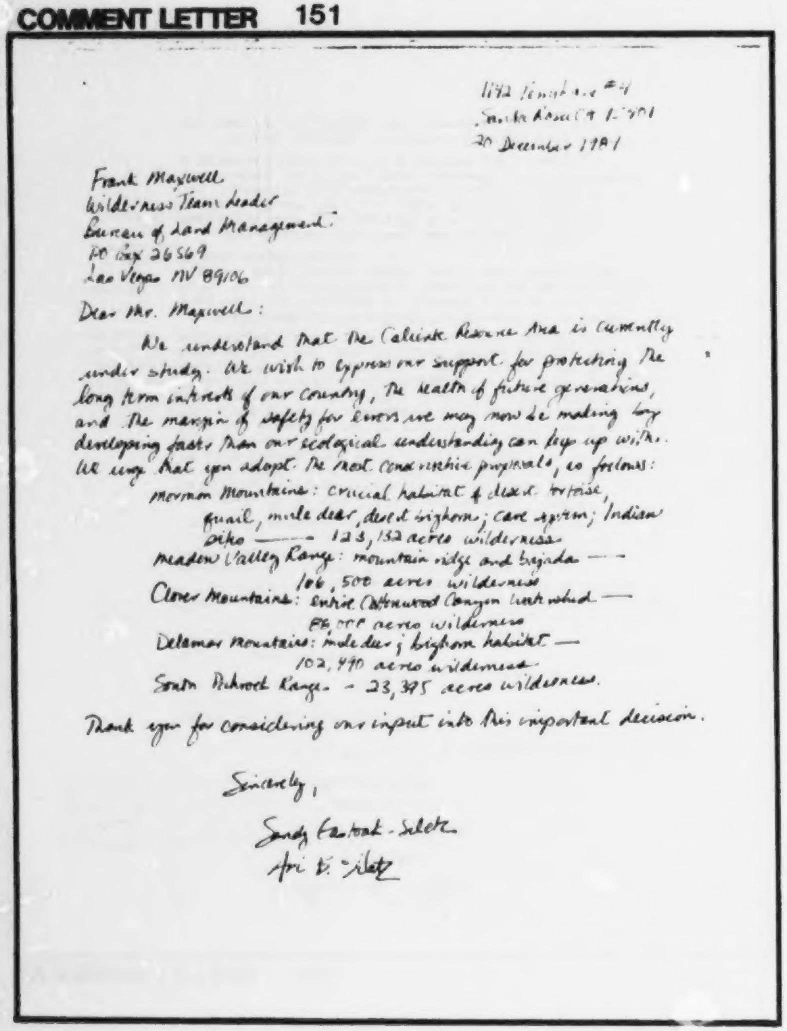
So, in your evaluations and recommendations on this subject, remember that more really is more -- and immeasurably better.

Sincerely,

Enid Shaw

ENID SHAW

COMMENT LETTER 151



1192 Jennings ave #4
Santa Rosa CA 95401
30 December 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
PO Box 26569
Las Vegas NV 89106

Dear Mr. Maxwell:

We understand that the Caliente Resource Area is currently under study. We wish to express our support for protecting the long term interests of our country, the health of future generations, and the margin of safety for errors we may now be making by developing faster than our ecological understanding can keep up with. We urge that you adopt the most conservative proposals, as follows:

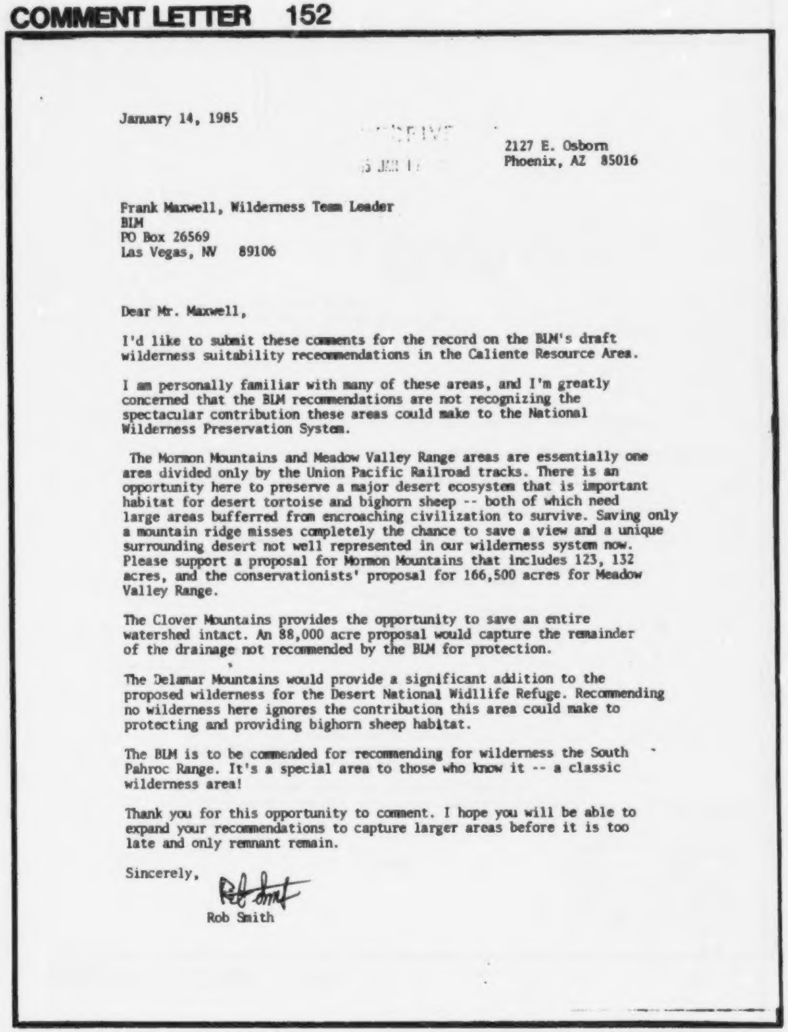
Mormon Mountains: crucial habitat of desert tortoise, quail, mule deer, desert bighorn; cave system; Indian sites —— 123,132 acres wilderness
Meadow Valley Range: mountain ridge and bajada —— 106,500 acres wilderness
Clover Mountains: entire Cottonwood Canyon watershed —— 88,000 acres wilderness
Delamar Mountains: mule deer; bighorn habitat — 102,490 acres wilderness
South Pahroc Range — 23,385 acres wilderness.

Thank you for considering our input into this important decision.

Sincerely,

Sandy Eastoak-Siletz
Ari B. Siletz

COMMENT LETTER 152



January 14, 1985

2127 E. Osborn
Phoenix, AZ 85016

Frank Maxwell, Wilderness Team Leader
BLM
PO Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

I'd like to submit these comments for the record on the BLM's draft wilderness suitability recommendations in the Caliente Resource Area.

I am personally familiar with many of these areas, and I'm greatly concerned that the BLM recommendations are not recognizing the spectacular contribution these areas could make to the National Wilderness Preservation System.

The Mormon Mountains and Meadow Valley Range areas are essentially one area divided only by the Union Pacific Railroad tracks. There is an opportunity here to preserve a major desert ecosystem that is important habitat for desert tortoise and bighorn sheep -- both of which need large areas bufferred from encroaching civilization to survive. Saving only a mountain ridge misses completely the chance to save a view and a unique surrounding desert not well represented in our wilderness system now. Please support a proposal for Mormon Mountains that includes 123, 132 acres, and the conservationists' proposal for 166,500 acres for Meadow Valley Range.

The Clover Mountains provides the opportunity to save an entire watershed intact. An 88,000 acre proposal would capture the remainder of the drainage not recommended by the BLM for protection.

The Delamar Mountains would provide a significant addition to the proposed wilderness for the Desert National Widlife Refuge. Recommending no wilderness here ignores the contribution this area could make to protecting and providing bighorn sheep habitat.

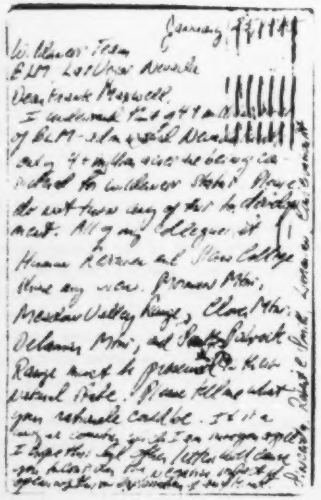
The BLM is to be commended for recommending for wilderness the South Pahroc Range. It's a special area to those who know it -- a classic wilderness area!

Thank you for this opportunity to comment. I hope you will be able to expand your recommendations to capture larger areas before it is too late and only remnant remain.

Sincerely,

Rob Smith

COMMENT LETTER 153



January [illegible]

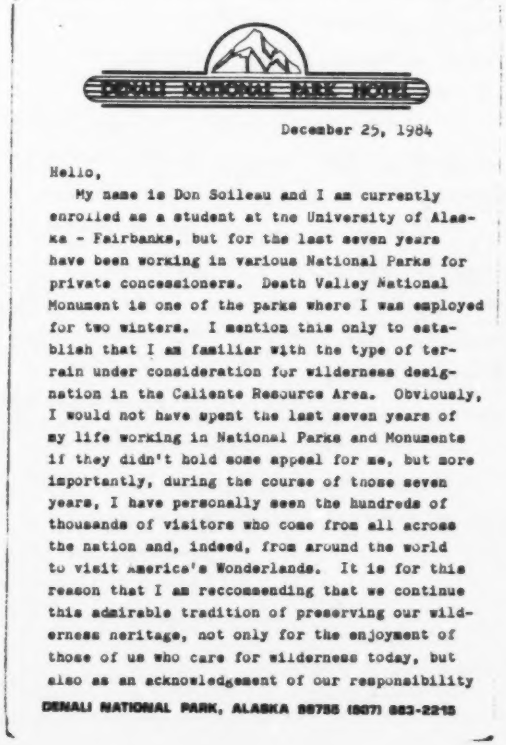
Wilderness Team
BLM Las Vegas Nevada

Dear Frank Maxwell,

I understand that 4.4 million [illegible] of BLM-administered Nevada [illegible] only 4+ million acres are being considered for wilderness status. Please do not have any of this be development. All of my colleagues at Human Resources and [illegible] College [illegible]. Parsnip Mtn, Meadow Valley Range, Clover Mtns, Delamar Mtns, and South Pahroc Range must be preserved in their natural state. Please tell me what your rationale could be. It is a unique country and I am [illegible]. I hope this and other letters will change your [illegible] the [illegible] of [illegible]

Sincerely, Robert C Smith, Lover of Environment

COMMENT LETTER 154



DENALI NATIONAL PARK HOTEL

December 25, 1984

Hello,

My name is Don Soileau and I am currently enrolled as a student at the University of Alaska - Fairbanks, but for the last seven years have been working in various National Parks for private concessioners. Death Valley National Monument is one of the parks where I was employed for two winters. I mention this only to establish that I am familiar with the type of terrain under consideration for wilderness designation in the Caliente Resource Area. Obviously, I would not have spent the last seven years of my life working in National Parks and Monuments if they didn't hold some appeal for me, but more importantly, during the course of those seven years, I have personally seen the hundreds of thousands of visitors who come from all across the nation and, indeed, from around the world to visit America's Wonderlands. It is for this reason that I am reccommending that we continue this admirable tradition of preserving our wilderness heritage, not only for the enjoyment of those of us who care for wilderness today, but also as an acknowledgement of our responsibility

DENALI NATIONAL PARK, ALASKA 99755 (907) 683-2215

COMMENT LETTER 154

to future generations. These are my specific recommendations for the five WSAs under consideration:

Mormon Mountains -- 123,132 acres
Meadow Valley Range -- 166,500 acres
Clover Mountains -- 88,000 acres
Delamar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

I cannot stress strongly enough that wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so that they can be enjoyed by all of us. Thank you for the opportunity to express my views on this matter.

Sincerely,

Don Soileau
219 Nerland
Fairbanks, Ak
99701

COMMENT LETTER 155

1302 Jones St.
Reno, NV 89503
Jan 5, 1985

Frank Maxwell
BLM, Las Vegas

Dear Mr Maxwell,

I am writing to you hoping I can influence the BLM to designate five areas in the Caliente Resource Area of Lincoln County as wilderness areas.

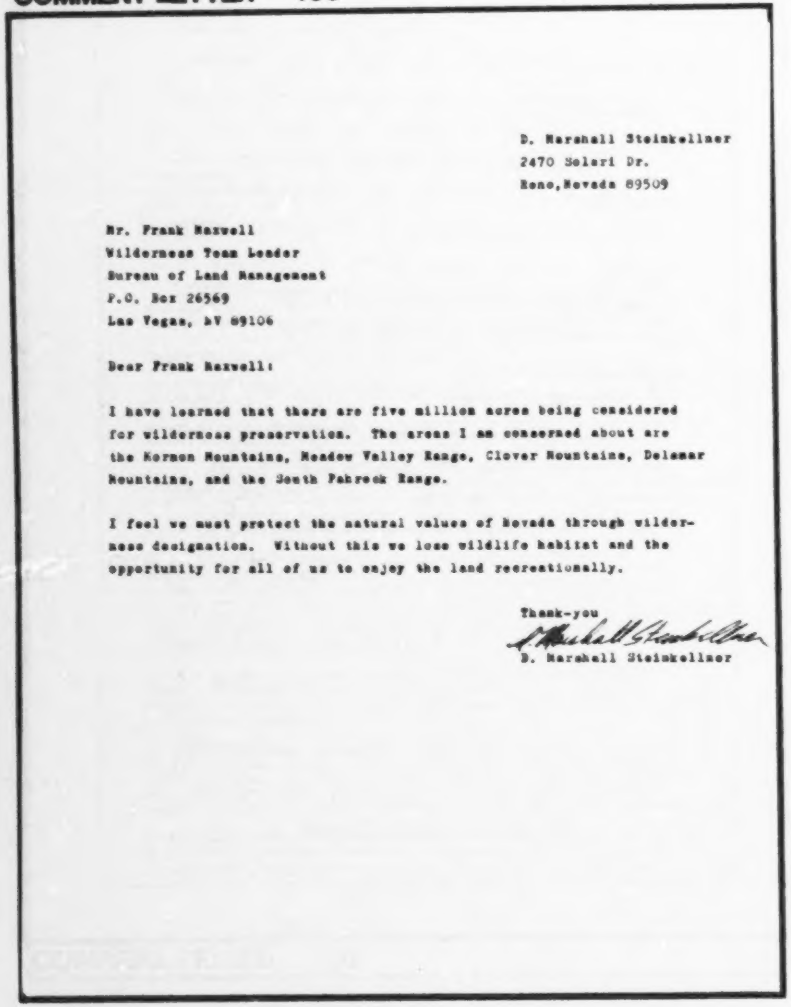
These are unique desert valleys and mountain areas which would add a new dimension to wilderness areas. They should be kept in their unspoiled state for all to enjoy.

I am referring to Mormon Mountain with its bighorn sheep, the Meadow Valley Range, Clover Mountains, Delamar Mountains, and the South Pahrock Range. These areas are home to bighorn sheep and mule deer. Desert tortoise also live here, as well as many other species of birds and animals.

Let us hope these areas will be preserved for all to explore in future years.

Yours truly,
Betty F. Starrett

COMMENT LETTER 156



D. Marshall Steinkellner
2470 Solari Dr.
Reno,Nevada 89509

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Frank Maxwell:

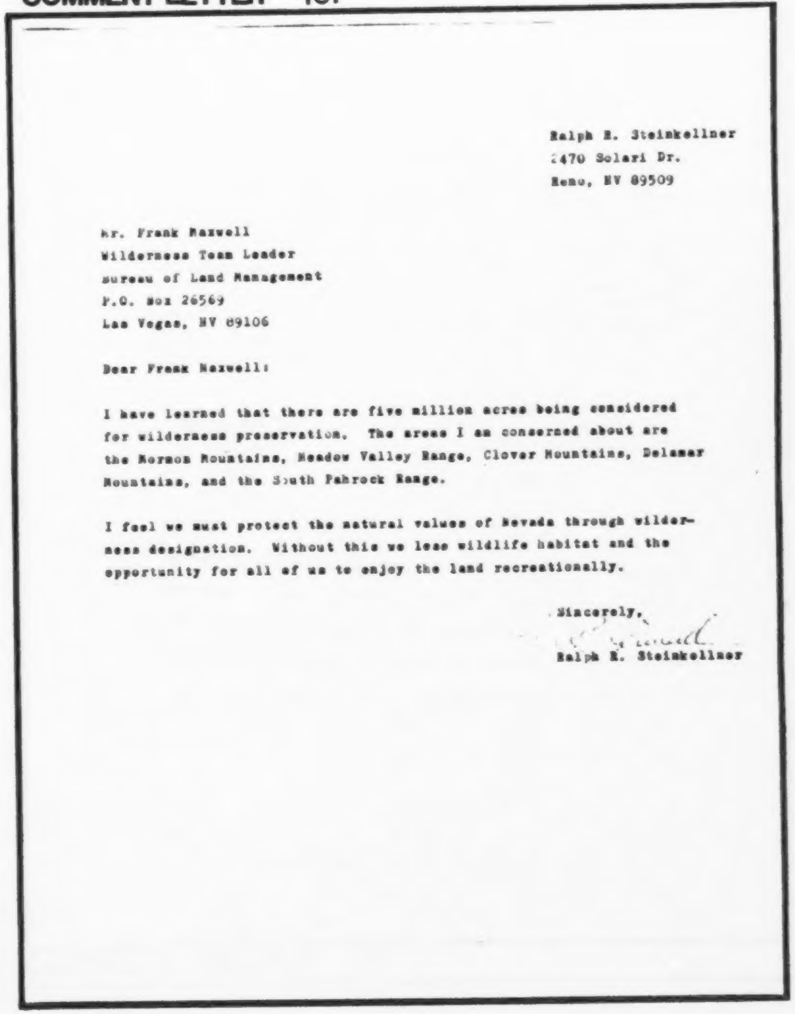
I have learned that there are five million acres being considered for wilderness preservation. The areas I am concerned about are the Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and the South Pahrock Range.

I feel we must protect the natural values of Nevada through wilderness designation. Without this we lose wildlife habitat and the opportunity for all of us to enjoy the land recreationally.

Thank-you

D. Marshall Steinkellner

COMMENT LETTER 157



Ralph R. Steinkellner
2470 Solari Dr.
Reno, NV 89509

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

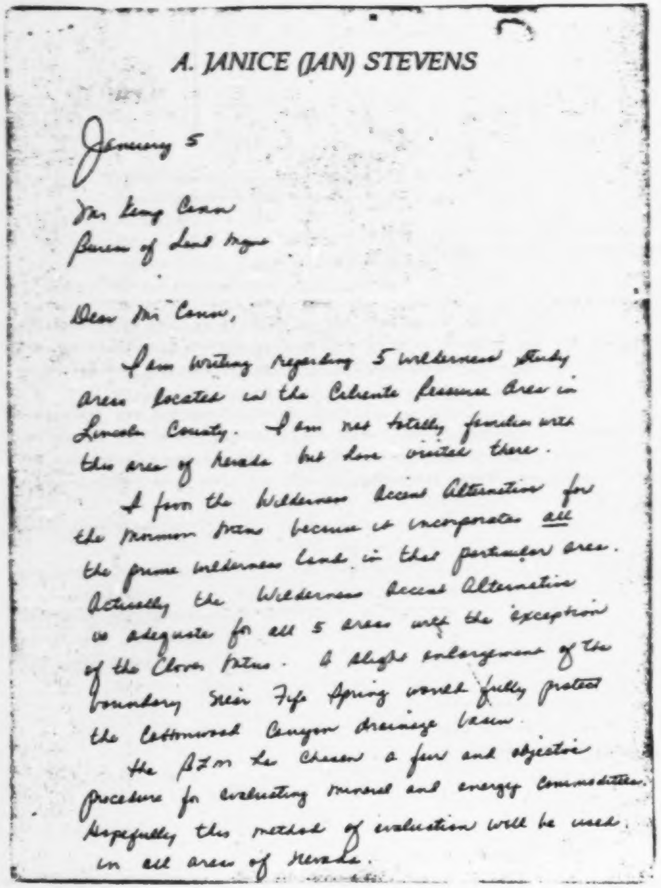
Dear Frank Maxwell:

I have learned that there are five million acres being considered for wilderness preservation. The areas I am concerned about are the Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and the South Pahrock Range.

I feel we must protect the natural values of Nevada through wilderness designation. Without this we lose wildlife habitat and the opportunity for all of us to enjoy the land recreationally.

Sincerely,

Ralph R. Steinkellner



A. JANICE (JAN) STEVENS

January 5

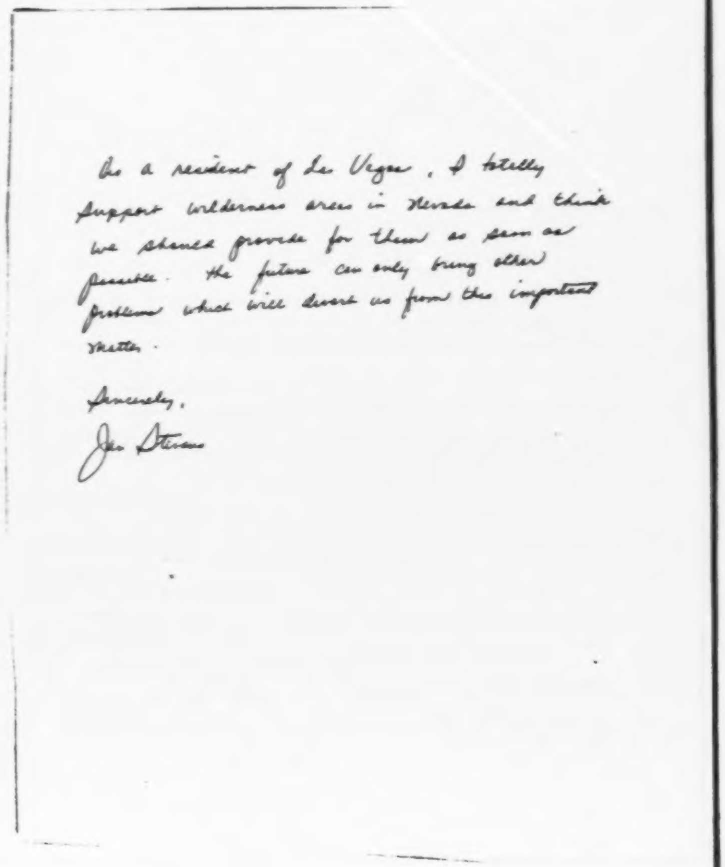
Mr Kemp Conn
Bureau of Land Mgmt

Dear Mr Conn,

I am writing regarding 5 wilderness study areas located in the Caliente Resource Area in Lincoln County. I am not totally familiar with this area of Nevada but have visited there.

I favor the Wilderness Access Alternative for the Mormon Mtns because it incorporates all the prime wilderness land in that particular area. Actually the Wilderness Access Alternative is adequate for all 5 areas with the exception of the Clover Mtns. A slight enlargement of the boundary near Fife Spring would fully protect the Cottonwood Canyon drainage basin.

The BLM has chosen a fair and objective procedure for evaluating mineral and energy commodities. Hopefully this method of evaluation will be used in all areas of Nevada.

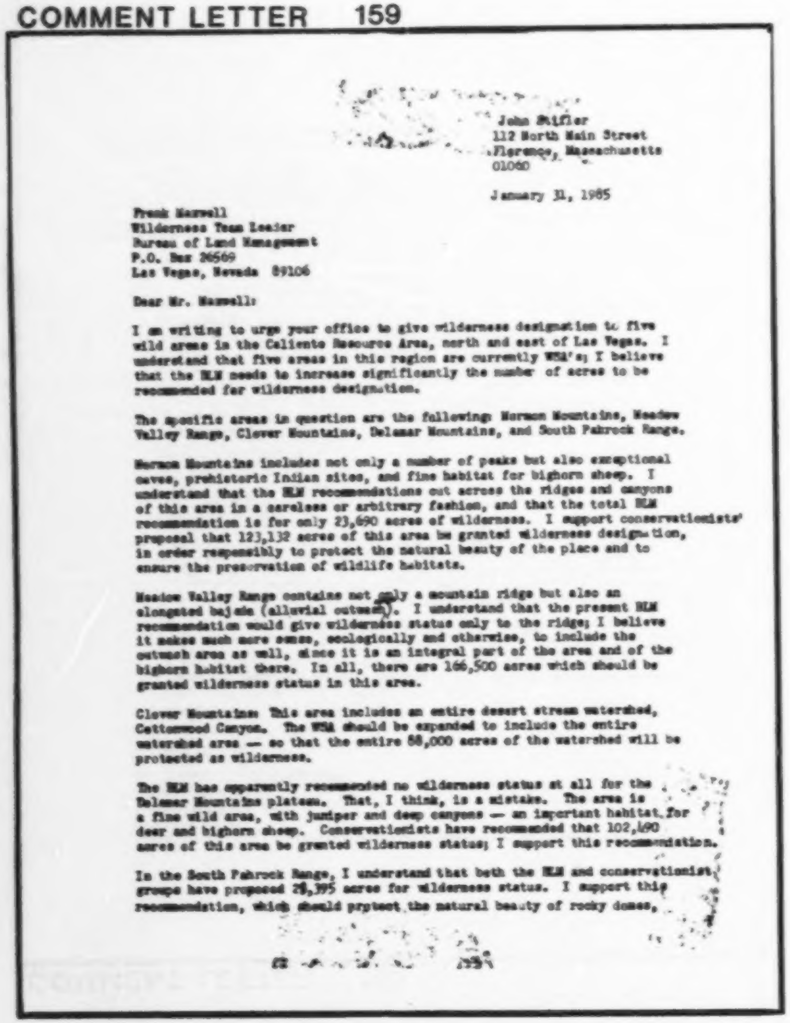


As a resident of Las Vegas, I totally support wilderness areas in Nevada and think we should provide for them as soon as possible. The future can only bring other problems which will divert us from this important matter.

Sincerely,

Jan Stevens

COMMENT LETTER 159



John Stifler
112 North Main Street
Florence, Massachusetts
01060

January 31, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

I am writing to urge your office to give wilderness designation to five wild areas in the Caliente Resource Area, north and east of Las Vegas. I understand that five areas in this region are currently WSA's; I believe that the BLM needs to increase significantly the number of acres to be recommended for wilderness designation.

The specific areas in question are the following: Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and South Pahrock Range.

Mormon Mountains includes not only a number of peaks but also exceptional caves, prehistoric Indian sites, and fine habitat for bighorn sheep. I understand that the BLM recommendations cut across the ridges and canyons of this area in a careless or arbitrary fashion, and that the total BLM recommendation is for only 23,690 acres of wilderness. I support conservationists' proposal that 123,132 acres of this area be granted wilderness designation, in order responsibly to protect the natural beauty of the place and to ensure the preservation of wildlife habitats.

Meadow Valley Range contains not only a mountain ridge but also an elongated bajada (alluvial outwash). I understand that the present BLM recommendation would give wilderness status only to the ridge; I believe it makes much more sense, ecologically and otherwise, to include the outwash area as well, since it is an integral part of the area and of the bighorn habitat there. In all, there are 166,500 acres which should be granted wilderness status in this area.

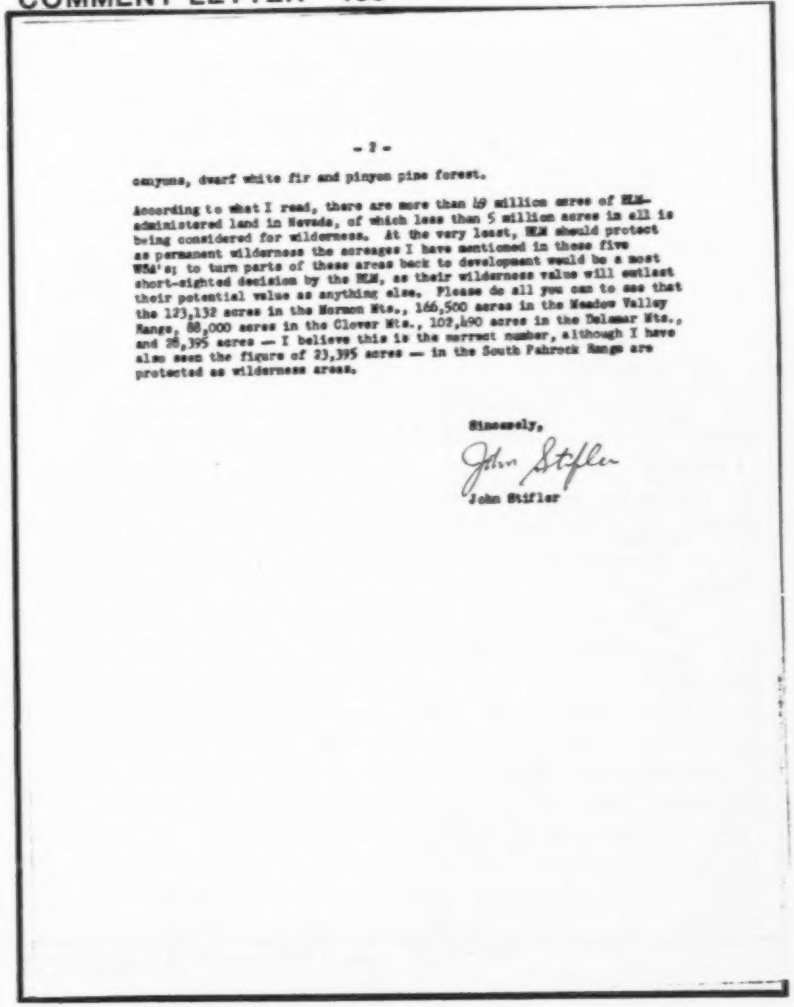
Clover Mountains: This area includes an entire desert stream watershed, Cottonwood Canyon. The WSA should be expanded to include the entire watershed area — so that the entire 88,000 acres of the watershed will be protected as wilderness.

The BLM has apparently recommended no wilderness status at all for the Delamar Mountains plateau. That, I think, is a mistake. The area is a fine wild area, with juniper and deep canyons — an important habitat for deer and bighorn sheep. Conservationists have recommended that 102,490 acres of this area be granted wilderness status; I support this recommendation.

In the South Pahrock Range, I understand that both the BLM and conservationist groups have proposed 28,395 acres for wilderness status. I support this recommendation, which should protect the natural beauty of rocky domes,

---

COMMENT LETTER 159



- 2 -

canyons, dwarf white fir and pinyon pine forest.

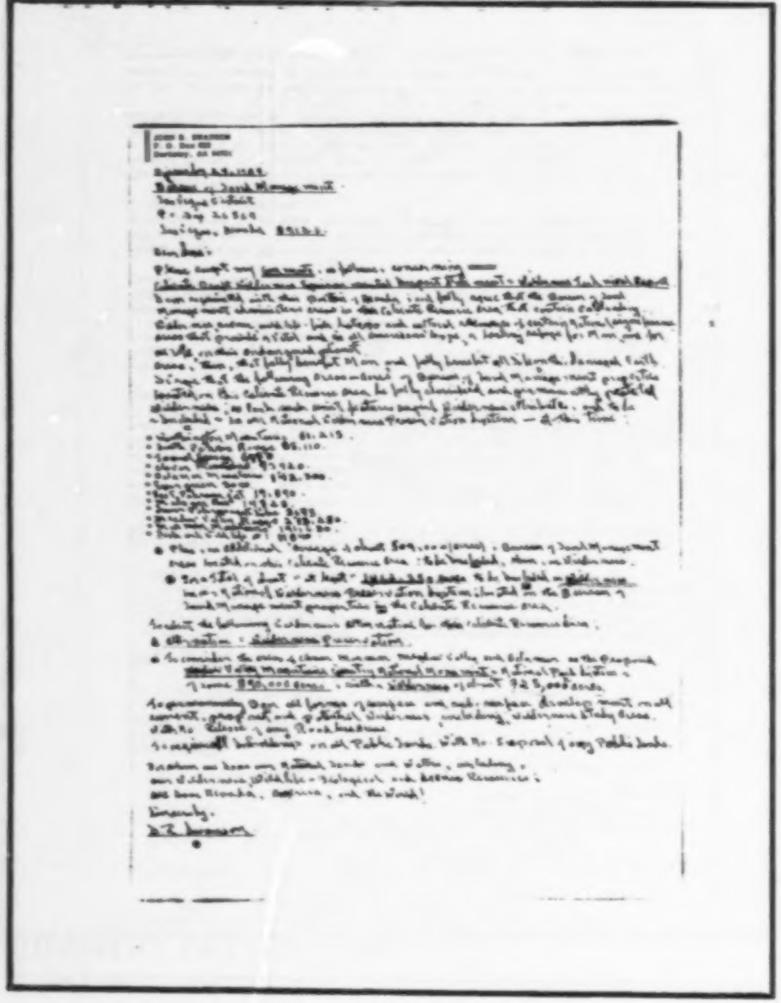
According to what I read, there are more than 49 million acres of BLM-administered land in Nevada, of which less than 5 million acres in all is being considered for wilderness. At the very least, BLM should protect as permanent wilderness the acreages I have mentioned in these five WSA's; to turn parts of these areas back to development would be a most short-sighted decision by the BLM, as their wilderness value will outlast their potential value as anything else. Please do all you can to see that the 123,132 acres in the Mormon Mts., 166,500 acres in the Meadow Valley Range, 88,000 acres in the Clover Mts., 102,490 acres in the Delamar Mts., and 28,395 acres — I believe this is the correct number, although I have also seen the figure of 23,395 acres — in the South Pahrock Range are protected as wilderness areas.

Sincerely,

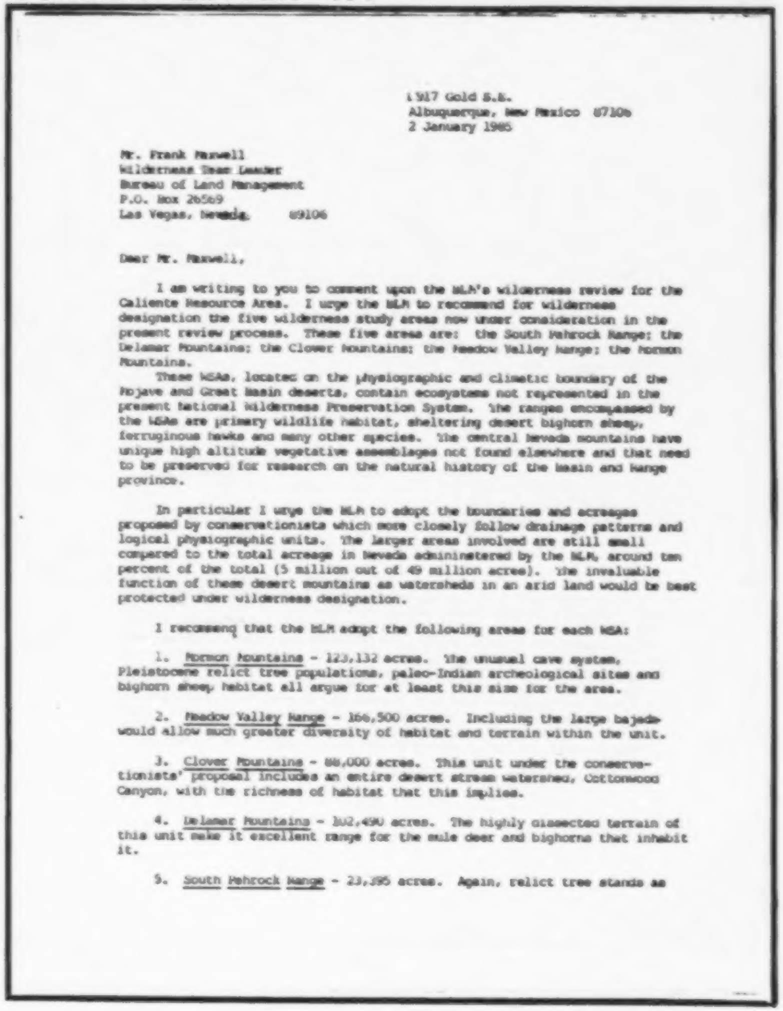
John Stifler

John Stifler

COMMENT LETTER 160



COMMENT LETTER 161



1917 Gold S.E.
Albuquerque, New Mexico 87106
2 January 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell,

I am writing to you to comment upon the BLM's wilderness review for the Caliente Resource Area. I urge the BLM to recommend for wilderness designation the five wilderness study areas now under consideration in the present review process. These five areas are: the South Pahrock Range; the Delamar Mountains; the Clover Mountains; the Meadow Valley Range; the Mormon Mountains.

These WSAs, located on the physiographic and climatic boundary of the Mojave and Great Basin deserts, contain ecosystems not represented in the present National Wilderness Preservation System. The ranges encompassed by the WSAs are primary wildlife habitat, sheltering desert bighorn sheep, ferruginous hawks and many other species. The central Nevada mountains have unique high altitude vegetative assemblages not found elsewhere and that need to be preserved for research on the natural history of the Basin and Range province.

In particular I urge the BLM to adopt the boundaries and acreages proposed by conservationists which more closely follow drainage patterns and logical physiographic units. The larger areas involved are still small compared to the total acreage in Nevada administered by the BLM, around ten percent of the total (5 million out of 49 million acres). The invaluable function of these desert mountains as watersheds in an arid land would be best protected under wilderness designation.

I recommend that the BLM adopt the following areas for each WSA:

1. Mormon Mountains - 123,132 acres. The unusual cave system, Pleistocene relict tree populations, paleo-Indian archeological sites and bighorn sheep habitat all argue for at least this size for the area.

2. Meadow Valley Range - 166,500 acres. Including the large bajada would allow much greater diversity of habitat and terrain within the unit.

3. Clover Mountains - 88,000 acres. This unit under the conservationists' proposal includes an entire desert stream watershed, Cottonwood Canyon, with the richness of habitat that this implies.

4. Delamar Mountains - 102,490 acres. The highly dissected terrain of this unit make it excellent range for the mule deer and bighorns that inhabit it.

5. South Pahrock Range - 23,395 acres. Again, relict tree stands as

COMMENT LETTER 161

well as the dome and canyon topography (with outstanding recreational potential) recommend this unit for wilderness.

Having visited and camped in Nevada, I have been impressed with the natural beauty and wild and scenic aspects of the state. Again, I urge that the BLM recognize the rare qualities of these five places recommend all of them for wilderness designation. Thank you for this opportunity to comment on the wilderness review process.

Very truly yours,

Jonathan M. Teague

Jonathan M. Teague

COMMENT LETTER 162

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dec 24, 1984

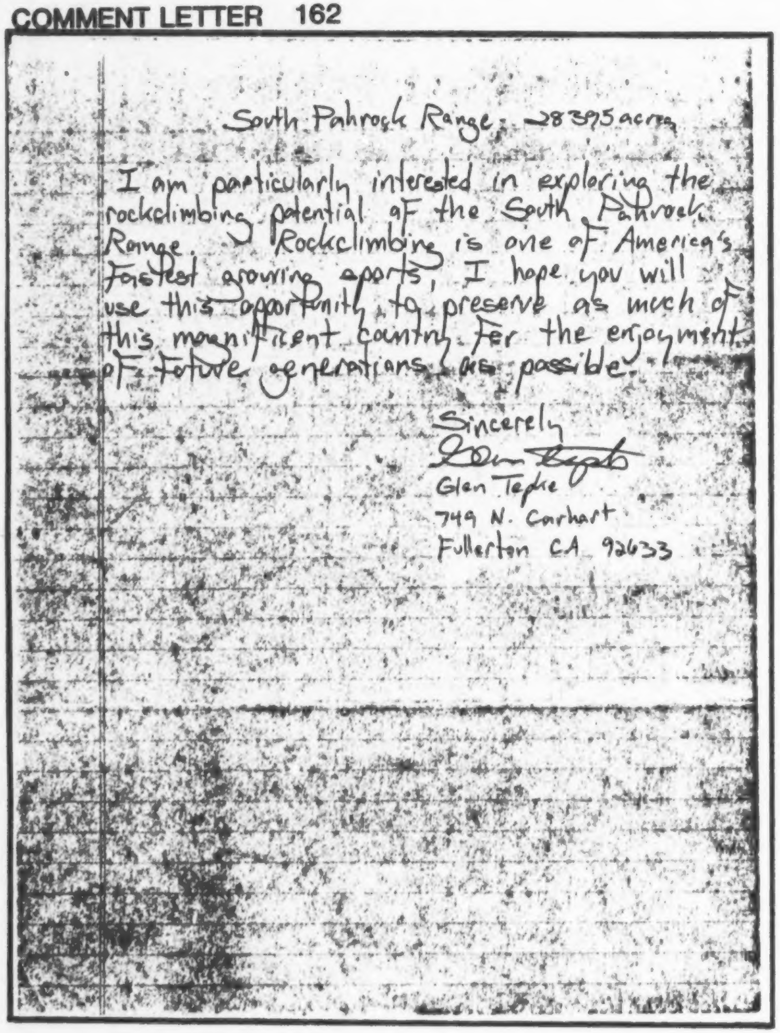
Dear Mr. Maxwell,

I understand that the BLM is currently reviewing its holdings in Nevada for wilderness recommendations. As an avid mountaineer and director of a therapeutic wilderness program for disturbed youth, I cannot stress enough the need for more and larger wilderness areas in Nevada and throughout the country. The use of wilderness adventure alternatives in juvenile corrections, mental health, and special education is rapidly expanding, as is interest in wilderness recreation among the general public. Wilderness designation is the only way to protect the resources needed for these activities.

Therefore I urge you to adopt the recomm
ations of local conservationists for new wilde
areas, specifically:

Mormon Mountains : 123,132 acres
Meadow Valley Range : 166,500 "
Clover Mountains : 88,000 "
Delamar Mountains : 102,490 "

COMMENT LETTER 162

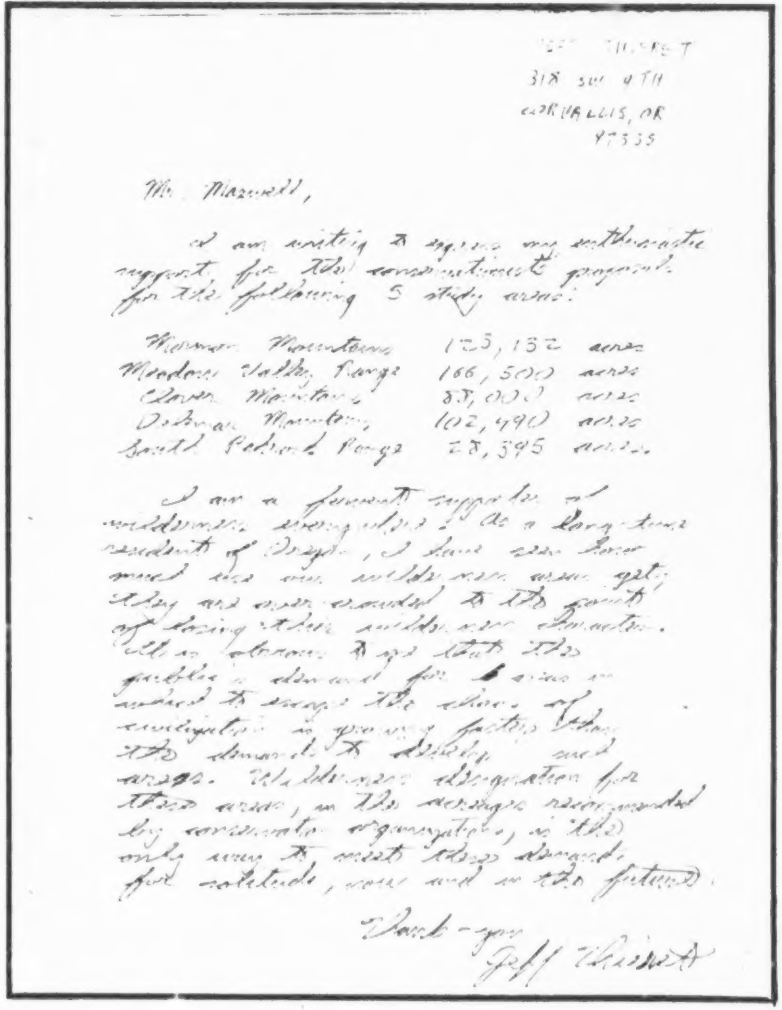


South Pahrock Range; 28395 acres

I am particularly interested in exploring the rockclimbing potential of the South Pahrock Range. Rockclimbing is one of America's fastest growing sports, I hope you will use this opportunity to preserve as much of this magnificent country for the enjoyment of future generations as possible.

Sincerely
Glen Tepke
Glen Tepke
749 N. Carhart
Fullerton CA 92633

COMMENT LETTER 163



JEFF [illegible]
318 SW 4TH
CORVALLIS, OR
97333

Mr. Maxwell,

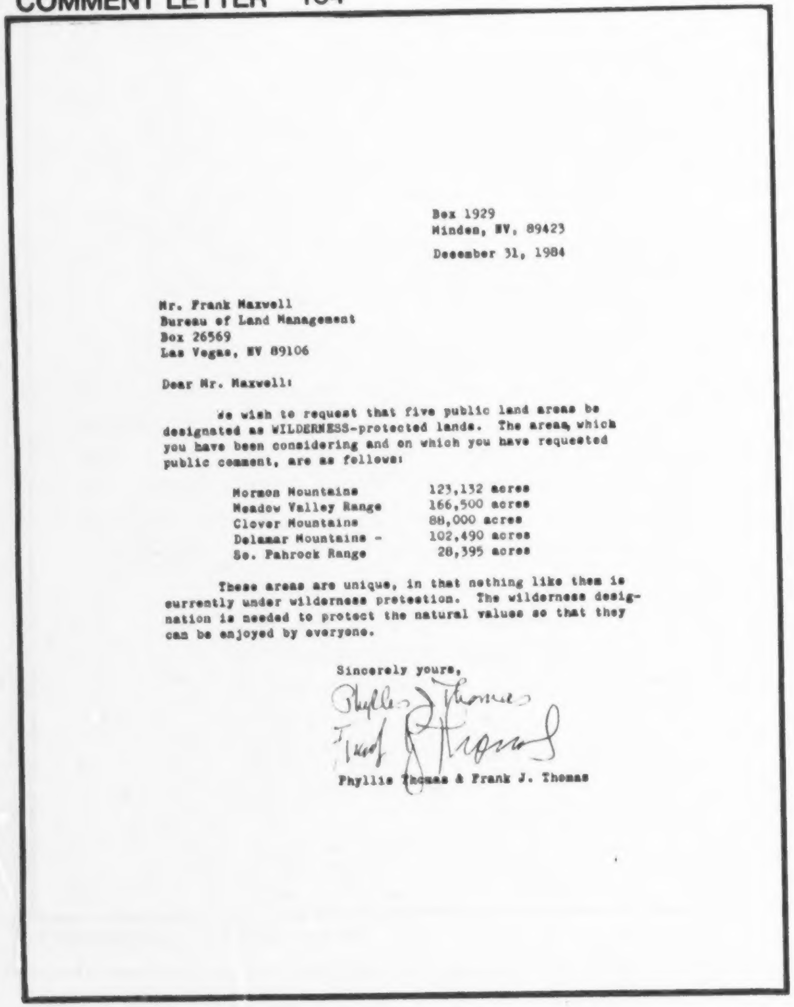
I am writing to express my enthusiastic support for the conservationists proposal for the following 5 study areas:

Mormon Mountains	1[illegible]3,152	acres
Meadow Valley Range	166,500	acres
Clover Mountains	85,000	acres
Delamar Mountains	102,490	acres
South Pahrock Range	28,395	acres.

I am a fervent supporter of wilderness everywhere! As a long-time resident of Oregon, I have seen fewer and less wilderness areas; yet, they are over-crowded to the point of losing their wilderness character. It is obvious to me that the public's demand for areas in which to escape the stress of civilization is growing faster than the demands to develop such areas. Wilderness designation for these areas, in the acreages recommended by conservation organizations, is the only way to meet these demands for solitude, now and in the future.

Thank-you
Jeff [illegible]

COMMENT LETTER 164



Box 1929
Minden, NV, 89423

December 31, 1984

Mr. Frank Maxwell
Bureau of Land Management
Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

We wish to request that five public land areas be designated as WILDERNESS-protected lands. The areas which you have been considering and on which you have requested public comment, are as follows:

Mormon Mountains	123,132 acres
Meadow Valley Range	166,500 acres
Clover Mountains	88,000 acres
Delamar Mountains -	102,490 acres
So. Pahrock Range	28,395 acres

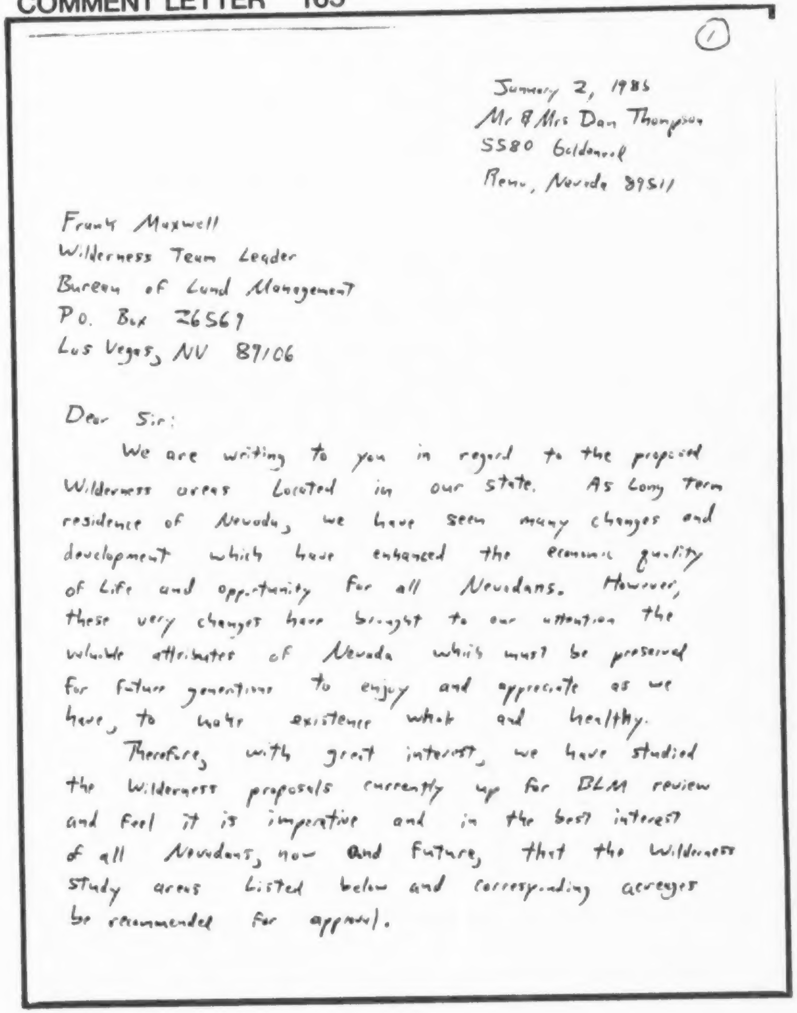
These areas are unique, in that nothing like them is currently under wilderness protection. The wilderness designation is needed to protect the natural values so that they can be enjoyed by everyone.

Sincerely yours,

Phyllis J Thomas
Frank J Thomas

Phyllis Thomas & Frank J. Thomas

COMMENT LETTER 165



①

January 2, 1985

Mr & Mrs Dan Thompson
5580 Goldenrod
Reno, Nevada 89511

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Sir:

We are writing to you in regard to the proposed Wilderness areas located in our state. As long term residence of Nevada, we have seen many changes and development which have enhanced the economic quality of life and opportunity for all Nevadans. However, these very changes have brought to our attention the valuable attributes of Nevada which must be preserved for future generations to enjoy and appreciate as we have, to make existence whole and healthy.

Therefore, with great interest, we have studied the Wilderness proposals currently up for BLM review and feel it is imperative and in the best interest of all Nevadans, now and future, that the Wilderness study areas listed below and corresponding acreages be recommended for approval.

COMMENT LETTER 165

②

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

Inclusion of these acreages under Wilderness protection is the best way to utilize this land for its maximum benefit over the long course of time. Only then can the natural values, wildlife habitat and recreational opportunities of these lands be assured.

Barbara S Mapes

COMMENT LETTER 166

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

When I first came to Nevada to live 6 years ago, I was much impressed with the unspoiled beauty of this state. Moving from the east where the land is over-used and over-developed, it was such a refreshing change. Now I understand the Bureau of Land Management is considering turning much of this land over to development by not designation millions of acres of this land as wilderness. I feel strongly that this land, all of it, should be strongly protected by placing it under the designation of protected wilderness. This wilderness designation would be the best way to protect the wildlife habitat and natural values inherent in these lands. It would also be very beneficial for the recreational opportunities these lands impart for all citizens to enjoy.

Wilderness land is already vanishing at a much too rapid rate. We should do everything in our power to protect these lands and the best way is do designate these acres as wilderness.

The lands I am particularly referring to are the 123,132 acres of the Mormon Mountains; the 166,500 acres of the Meadow Valley Range; the 88,000 acres of the Clover Mountains (including the entire Cottonwood Canyon watershed); the 102,490 acres of the Delamar Mountains and the 28,395 acres of the South Pahrock Range.

All five of these Wilderness Study Areas (WSAs) all deserve wilderness designation and should be so accorded.

Thank you very ~~much~~ for your consideration.

Sincerely,

Robert L Tolfree

Robert L. Tolfree
3622 Fourth Street
Sparks, NV 89431

COMMENT LETTER 167

January 2, 1985

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Mr. Maxwell:

I understand that there are several areas now in review phase for their wilderness values. In particular, the Mormon Mountains -- 123, 132 acres; the Meadow Valley Range -- 166,500 acres; the Clover Mountains -- 88,000 acres; the Delamar Mountains -- 102,490 acres; and the South Pahrock Range -- 28,395 acres.

This area is unique in that there is no other area or areas exactly like it under wilderness protection. Basin and range country, desert valleys of creosote and saltbrush, desert mountains, all providing a very necessary habitat for the mule deer, desert bighorn sheep, ferruginous hawks, and many other forms of wildlife.

Development is important for the continuation of the economic process and human life. It is equally vital to our life, as human beings, to preserve enough wilderness areas, to preserve wildlife, in order to preserve and insure our own future.

Ecologically, our planet is a very fine-tuned machine. It has become and is becoming more and more upset in this manner. Human development and greed are undermining the ecological balance; it is not yet too late to attempt to re-balance the ecological scales. In so doing, it is not only the wildlife that we are protecting, it is ourselves. Many people fail to see the connection between wilderness conservation and preservation and themselves, and yet, we are very much a part of this system, so delicately balanced, that if we do not take into concern preservation of these areas, preservation of the wildlife of these areas, that we are, in effect, undermining our own lives and futures, speeding ourselves to our own end.

There is a place for development. There is a place for people. There is a need and a place for wilderness and the animal and plant life that relies on such wilderness areas for survival. Please help and designate these special places for wilderness preservation and help preserve the human race.

Thank you.

Elissa Tree

Elissa Tree

COMMENT LETTER 168

John Unwin
P.O. Box 3836
Bozeman, Montana 59772

January 4, 1985

Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, Nevada 89106

Dear Sir:

In response to the draft environmental impact statement concerning the Mormon Mountains, Meadow Valley Range, Clover Mountains, Delmar Mountains and the South Pahrock Range WSAs within the Caliente Resource Area, I have the following comments.

I am in agreement with your proposed wilderness for the South Pahrock Range, but disagree with your preferred alternative for the other four areas.

In the Mormon Mountains a 123,100 acre wilderness should be established. The boundaries of the preferred alternative for this area make no ecological sense.

A 102,500 acre Delmar Mountains wilderness should be established.

A Clover Mountains wilderness of 88,000 acres should be established. This includes the entire Cottonwood Canyon watershed.

The proposed Meadow Valley Range wilderness should be include more than the mountain ridge and encompass about 166,500 acres.

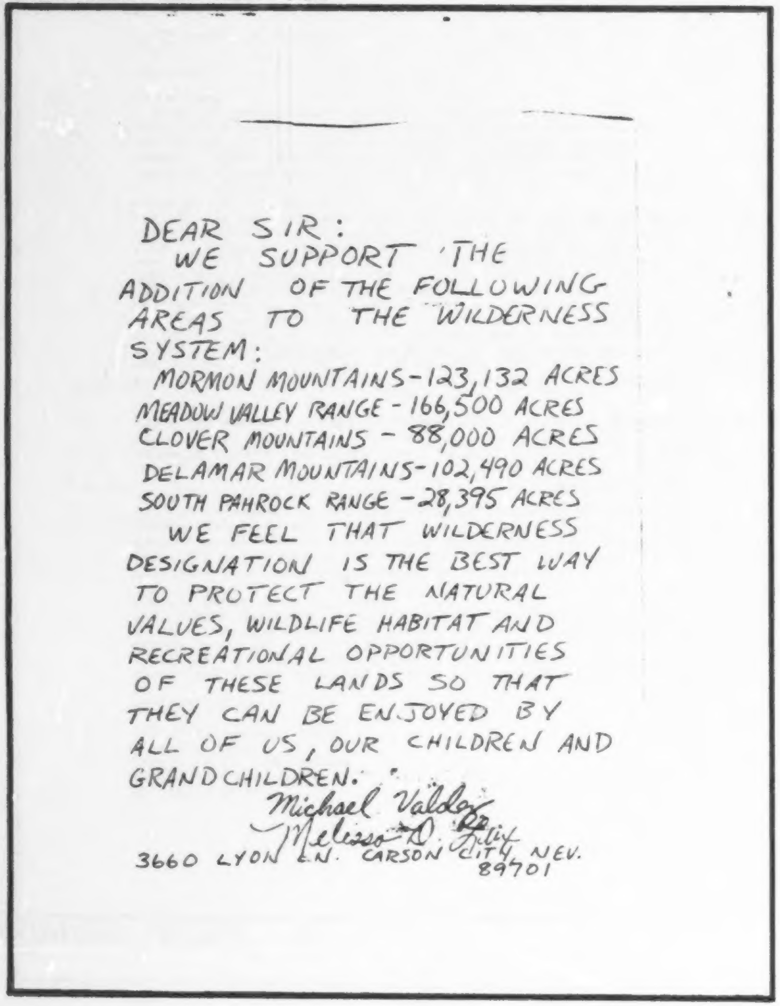
Please inform me of your final decisions concerning these areas. Wilderness is a part of my heritage and I believe in protecting it for a multitude of reasons I am sure you have heard a hundred times already.

Sincerely yours,

John Unwin

John Unwin

COMMENT LETTER 169



DEAR SIR:

WE SUPPORT THE ADDITION OF THE FOLLOWING AREAS TO THE WILDERNESS SYSTEM:

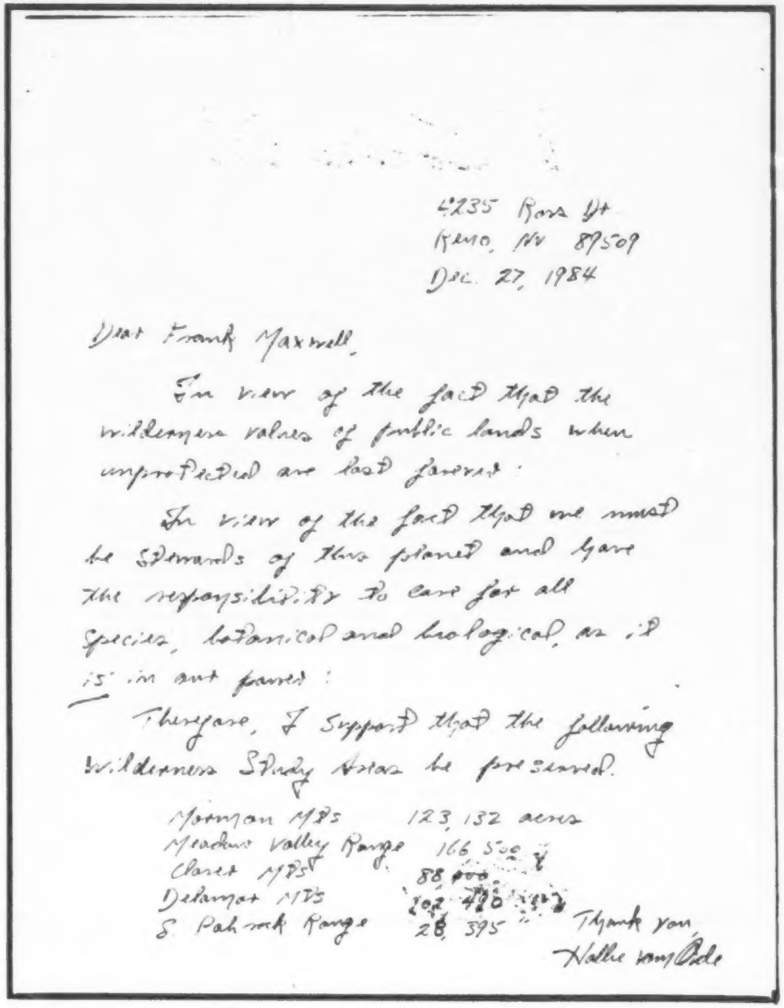
MORMON MOUNTAINS - 123,132 ACRES
MEADOW VALLEY RANGE - 166,500 ACRES
CLOVER MOUNTAINS - 88,000 ACRES
DELAMAR MOUNTAINS - 102,490 ACRES
SOUTH PAHROCK RANGE - 28,395 ACRES

WE FEEL THAT WILDERNESS DESIGNATION IS THE BEST WAY TO PROTECT THE NATURAL VALUES, WILDLIFE HABITAT AND RECREATIONAL OPPORTUNITIES OF THESE LANDS SO THAT THEY CAN BE ENJOYED BY ALL OF US, OUR CHILDREN AND GRANDCHILDREN.

Michael Valdez Jr.
Melissa D. [illegible]

3660 LYON LN. CARSON CITY NEV.
89701

COMMENT LETTER 170



4235 Ross St
Reno, NV 89509
Dec. 27, 1984

Dear Frank Maxwell,

In view of the fact that the wilderness values of public lands when unprotected are lost forever:

In view of the fact that we must be stewards of this planet and have the responsibility to care for all species, botanical and biological, as it is in our power:

Therefore, I support that the following Wilderness Study Areas be preserved.

Mormon MTs 123,132 acres
Meadow Valley Range 166,500 "
Clover MTs 88,000
Delamar MTs 102,490 "
S. Pahrock Range 28,395 "

Thank you,
Hallie van Ode

COMMENT LETTER 171

December 22, 1984

Mr. Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

1 I'm writing to you in order to hopefully influence your recommendations regarding the Caliente Resourse Area. If these areas revert to private ownership, then we and our children will be unable to enjoy these wilderness and wildlife areas. These areas should belong to all of us - and not to a few individuals who conceivably and probably would exploit them for personal profit.

We already are witnessing the profits - sometimes and maybe more appropriately spelled profits - of doom. I have seen many areas that have been despoiled of their natural beauty, wildlife, and recreational opportunities by the machinations of an exploiter.

What are the values we should emulate? Should we seek continued protection or say the hell with it?

My recommendations are as follows for the Caliente Resourse Area:

Mormon Mountains.........123,132 acres
Meadow Valley Range......166,500 acres
Clover Mountains......... 88,000 acres
Delamar Mountains........102,490 acres
South Pahrock Range...... 28,395 acres

Please advise me of what your recommendations are and will be.

Sincerely,
Nick Wagner
NICK WAGNER
1567 Gault Way
Sparks, NV 89431

RESPONSE LETTER 171

Response to Letter 171

1. These areas have always been and will likely remain in public ownership. While wilderness designation would preclude their going into private ownership, nondesignation does not mean they will necessarily be sold to private owners.

COMMENT LETTER 172

1428 San Felipe Drive
Boulder City, NV 89005
27 December 1984

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

The 17 December BLM Wilderness Alert from the Sierra Club has made me aware of your current review of Wilderness Study Areas in the Mormon Mountains, Meadow Valley Range, Clover Mountains, Delamar Mountains, and South Pahrock Range. I would appreciate receiving any information your study might develop on alternative uses of the acreages recommended for wilderness by the Sierra Club. Until I receive such information, I would appreciate your noting for the record my support of wilderness protection for the 123,132 acres, 166,500 acres, 88,000 acres, 102,490 acres, and 28,395 acres in these five mountain ranges, respectively.

Sincerely,

Eric G. Walcher

COMMENT LETTER 173

874 Coloma Drive
Carson City, NV 89701
January 6, 1985

Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell,

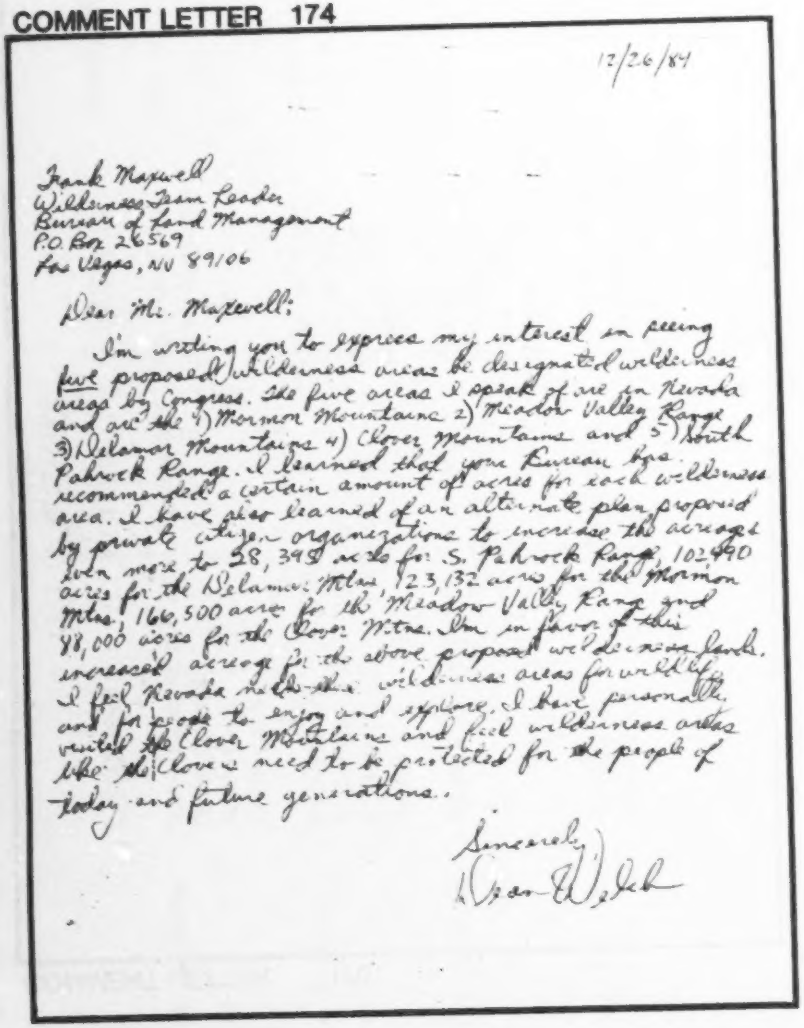
Contrary to some claims, wilderness designation is not single use management. Rather, it ensures protection of watershed, wildlife and recreation values. We therefore wholeheartedly support wilderness designation in your district for the following areas:

Mormon Mountains - 123,132 acres
Meadow Valley Range - 166,500 acres
Clover Mountains - 88,000 acres
Delamar Mountains - 102,490 acres
South Pahrock Range - 28,395 acres

Thankyou for your consideration.

Sincerely yours,
Steve & Kathie Weaver

COMMENT LETTER 174



12/26/84

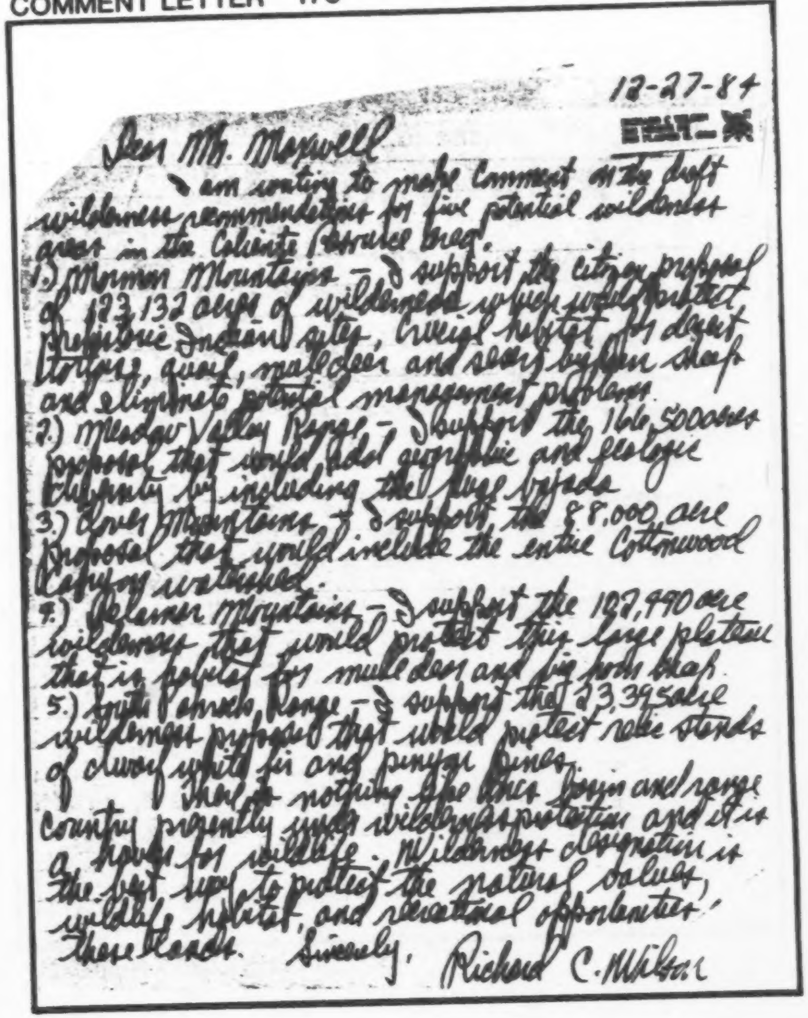
Frank Maxwell
Wilderness Team Leader
Bureau of Land Management
P.O. Box 26569
Las Vegas, NV 89106

Dear Mr. Maxwell:

I'm writing you to express my interest in seeing five proposed wilderness areas be designated wilderness areas by Congress. The five areas I speak of are in Nevada and are the 1) Mormon Mountains 2) Meadow Valley Range 3) Delamar Mountains 4) Clover Mountains and 5) South Pahrock Range. I learned that your Bureau has recommended a certain amount of acres for each wilderness area. I have also learned of an alternate plan proposed by private citizen organizations to increase the acreage even more to 28,395 acres for S. Pahrock Range, 102,490 acres for the Delamar Mtns, 123,132 acres for the Mormon Mtns, 166,500 acres for the Meadow Valley Range and 88,000 acres for the Clover Mtns. I'm in favor of this increased acreage for the above proposed wilderness lands. I feel Nevada needs these wilderness areas for wildlife and for people to enjoy and explore. I have personally visited the Clover Mountains and feel wilderness areas like the Clovers need to be protected for the people of today and future generations.

Sincerely,

COMMENT LETTER 175



12-27-84

Dear Mr. Maxwell

I am writing to make comment on the draft wilderness recommendations for five potential wilderness areas in the Caliente Resource Area.

1.) Mormon Mountains – I support the citizen proposal of 123,132 acres of wilderness which would protect prehistoric Indian sites, crucial habitat for desert tortoise, quail, mule deer and scenic bighorn sheep and eliminate potential management problems.

2.) Meadow Valley Range – I support the 166,500 acres proposal that would add geographic and geologic diversity by including the huge bajada

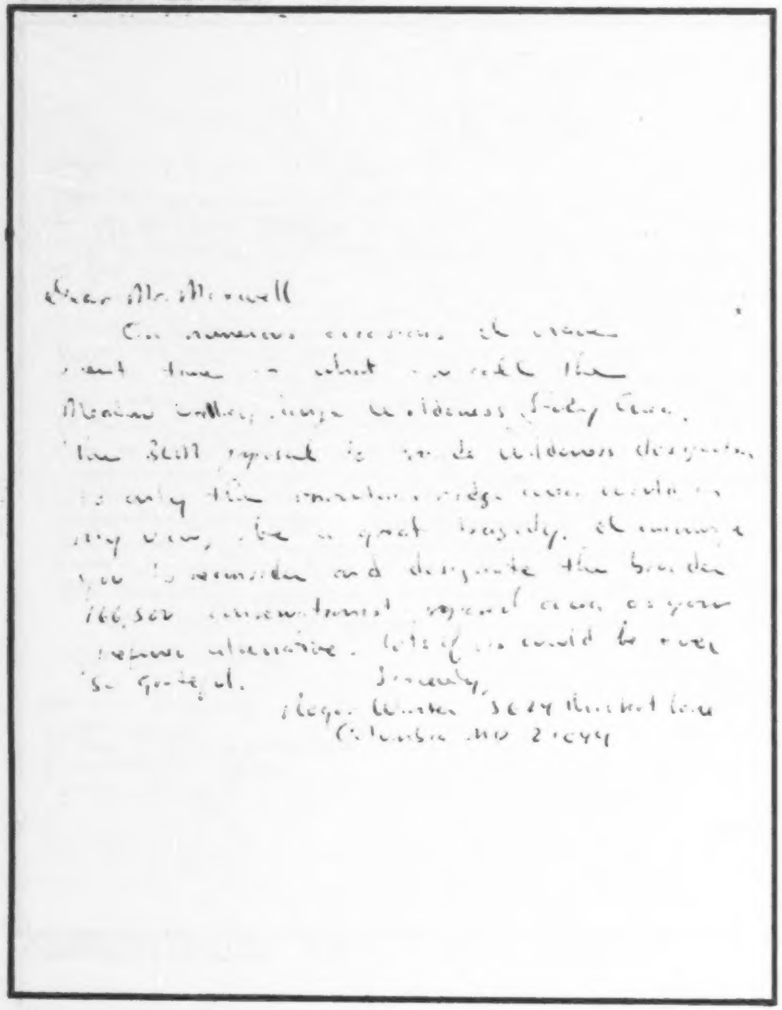
3.) Clover Mountains – I support the 88,000 acre proposal that would include the entire Cottonwood Canyon watershed.

4.) Delamar Mountains – I support the 102,490 acre wilderness that would protect this large plateau that is habitat for mule deer and big horn sheep.

5.) South Pahrock Range – I support the 28,395 acre wilderness proposal that would protect rare stands of dwarf white fir and pinyon pines.

There is nothing like these basin and range country presently under wilderness protection and it is a haven for wildlife. Wilderness designation is the best way to protect the natural values, wildlife habitat, and recreational opportunities these lands. Sincerely, Richard C. Wilson

COMMENT LETTER 176

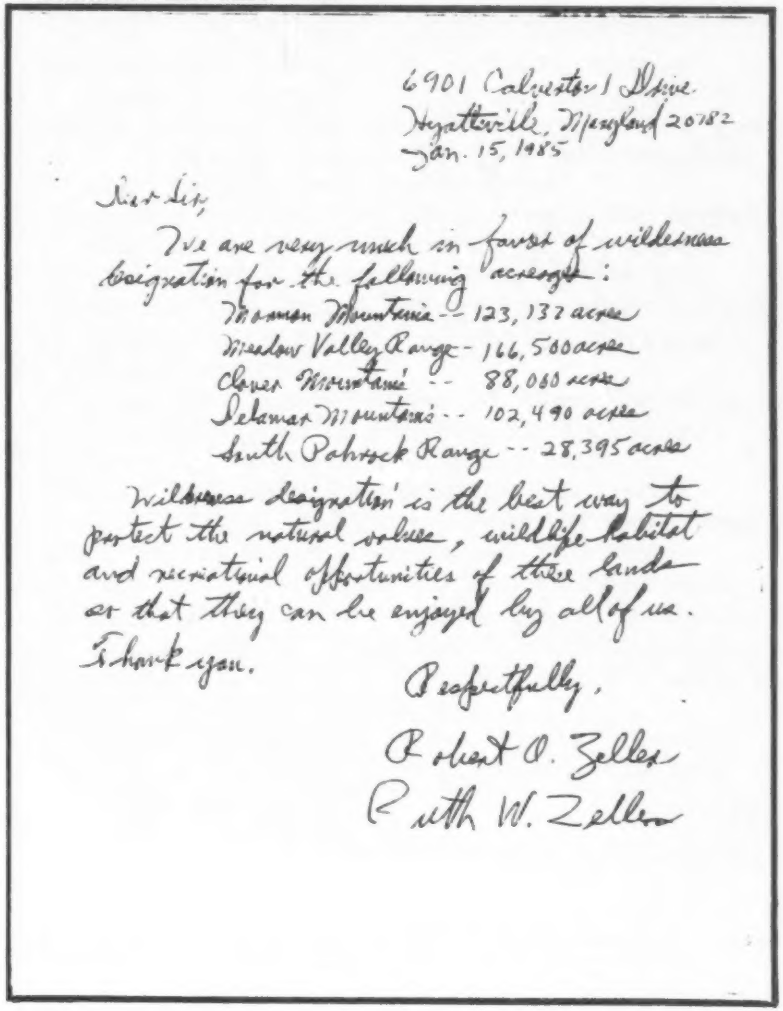


Dear Mr. Morrell

On numerous occasions I have spent time in what we call the Meadow Valley Range Wilderness Study Area. The BLM proposal to make wilderness designation to only the mountain ridge area would in my view, be a great tragedy. I encourage you to reconsider and designate the broader 166,500 conservationist proposal area as your preferred alternative. Lots of us would be ever so grateful.

Sincerely,
Roger Winter 5824 Thicket Lane
Columbia MD 21044

COMMENT LETTER 177



6901 Calverton Drive
Hyattsville, Maryland 20782
Jan. 15, 1985

Dear Sir,

We are very much in favor of wilderness designation for the following acreage:

Mormon Mountains -- 123,137 acres
Meadow Valley Range - 166,500 acres
Clover Mountains -- 88,080 acres
Delamar Mountains -- 102,490 acres
South Pahrock Range -- 28,395 acres

Wilderness designation is the best way to protect the natural values, wildlife habitat and recreational opportunities of these lands so that they can be enjoyed by all of us. Thank you.

Respectfully,
Robert O. Zeller
Ruth W. Zeller

LIST OF PREPARERS

NAME	ASSIGNMENT	POSITION	EDUCATION	EXPERIENCE
Brent Bestrum	Non-Wilderness Development Scenarios (Minerals)	Zone Geologist	B.S. Geology Univ. Montana	BLM 16 yrs.
Jake Brierley	Wilderness & Recreation & Technical Reports	CRA Outdoor Recreation	B.A. History Cal. State Univ. Long Beach	USFS 2 yrs. BLM 6 yrs. CCE 5 yrs.
Diane Colcord	Maps & Graphics	Visual Info Specialist	B.S. Art Education Univ. of Oregon	BLM 20 yrs.
Dawna Ferris	Cultural Resources	Archeologist	B.A. Romance Languages; Univ. Maine, Orono, ME; B.A. Anthrop. Univ. of NV, LV M.A. French, Univ. New Mexico M.A. (Pending) Univ. of NV, LV	BLM 2 yrs
Edward Guerrero	Wildlife	CRA Wildlife Biologist	B.A. Agriculture N.M. State	BLM 8 yrs.
Richard Gundry	Minerals	CRA Geologist	B.S. Geophysics, Univ. of CA	UC Riverside Consultant 2yrs. BLM 3 yrs.
Kevin Leary	Soil, Water and Air	Soil Scientist	B.S. Soil Science OR State Univ.	BLM 5 yrs.
Frank Maxwell	Team Leader	Environ. Prot. Spec.	B.S. RNR Univ. of NV, Reno	USFS 1/2 yrs. BLM 20-1/2 yrs.
Grace McEwan	Word Processor Operator	Clerk Typist	B.A. Liberal Arts, Hunter College, NY; APG School U.S. Navy; Medical & Dental Assist. Home Study Wang Trng.	BLM 6-1/2 yrs

NAME	ASSIGNMENT	POSITION	EDUCATION	EXPERIENCE
Gary M. Pavusko	Fire Mgt.	L.V. Dist. Fire Mgt. Officer	B.S. Natural Resources Conservation, San Jose State	USFS 2 yrs. BLM 12 yrs.
Richard A. Orr	Range	CRA Supvry Range Conservationist	B.S. Forestry (Range Mgt) (Univ. of MT, Missoula)	BLM 8-1/2 yrs.
Dennis J. Samuelson	Lands	LV District Realty Spec.	B.S. Forest Mgt., Univ. of Montana	BLM 13 yrs.
David Shafersman	Water	District Hydrologist	B.S. Nat. Resources Univ. of NV, Reno	BLM 10 yrs.
Robert Taylor	Wilderness & Recreation	Dist. Outdoor Recreation Planner	B.S. Agri. (Landscape Architecture) Univ. of Arizona	City Tucson 1yr. BLM 14-1/2 yrs.

APPENDIX A

MINERAL CLASSIFICATION SYSTEM

Energy and Mineral Resources

Determination of energy or mineral resource potential for each of the five WSAs involved evaluation of existing and newly acquired data. The existing BLM mineral resource inventory for the Caliente Planning Unit was supplemented with Geology-Energy-Mineral (GEM) Resource Assessment Reports for each WSA. The two assessments utilized published geologic and mineral information. The existing literature is somewhat limited both in quantity and detail for purposes of determining energy and mineral potential in these WSAs--this is largely due to the areas' remoteness and possibly due to a previous lack of interesting mineral potential. The known data was supplemented with limited field-checking and information from unpublished case-files and other records. Individuals and companies with inholdings were also solicited for their input. Additionally, newly acquired geochemical data was collected and is currently being analyzed and interpreted by the USGS for each WSA. A variety of schemes to classify mineral potential were used. The actual classification of mineral potential used in this analysis is discussed later. The geology, energy, and mineral resources and the classification of potential for each WSA is discussed in more detail in the Wilderness Technical Report. As new data becomes available from public input regarding areas of critical mineral potential or other industry or individual data contributions, the classification or confidence level of an area may change. Mineral surveys will be conducted by the U.S. Geological Survey/Bureau of Mines for any of the areas that the BLM Director recommends as suitable for wilderness designation. Some of these have been completed and will bolster the existing data.

The McKelvey system for the classification of mineral potential has traditionally been used in the mineral resource inventory portion of the Bureau Planning Process. This system compares the economic and geologic feasibility of a deposit based on known or inferred relationships. The system relies heavily on known occurrences and does not have an adequate breakdown for potentially undiscovered, but inferred deposits. It does not consider the relative importance of the potential of a particular type of commodity in contrast to those commodities of lesser or greater importance. The ranking scheme adopted for BLM GEM Resource Assessment compares the favorability for occurrence based on various degrees of known or inferred relations and is further qualified (or unqualified) by the level of confidence of the data used in the favorability classification. The GEM system also does not consider the relative importance of the potential of a particular type of commodity in contrast to those commodities of lesser or greater importance. This ranking system tends to rate inferred occurrences highly--regardless of economic, practical, or legal considerations. The classification system used in this EIS analysis involves relative ranking of commodity groups by and is based on the potential importance of a possible new deposit as a function of modern usage and domestic scarcity (see Table A-1). The impact analysis in Chapter 4 segregates these by method of legal acquisition.

The mineral commodity groups are defined and ranked in descending order of significance in Table A-1, with mineral types in Group 1 having a greater significance than the lower classes. The classification of mineral potential (Table A-2) is a function of these mineral groups and is based on what is known about the size, demand, or importance of a deposit containing a particular mineral group relative to others. In Table A-2, each Class (1-5) is ranked in descending significance and corresponds to a mineral deposit area, with Class 1 areas having a greater significance or mineral potential than the next lower class of area and likewise down the list.

Areas with the greatest potential (1) would contain a significant quantity of minerals from Group 1, 2, and 3 or would contain minerals of any group that are presently mined within the Planning Unit. Areas with the next lower amount of potential (2) would contain occurrences not in great quantities of minerals from Group 1, 2, and 3 and would include Group 4 minerals in insignificant amounts but without demand (this class also includes areas inferred to contain significant amounts of Group 1, 2, and 3 minerals). Areas with the next lower amount of potential (3) are inferred favorable for discovery of group 1, 2, 3, and 4 minerals in unknown amounts. Areas with the next lower amount of potential (4) are areas with unqualified potential pending additional data. Areas with unqualified potential should not be considered as less than the areas with higher potential--much of the area with unqualified potential may be included with the next lower class once significant data are interpreted. The area with lowest potential (5) is considered either unfavorable for the type of mineral deposit or no data is expected that will determine otherwise. The potential classifications should not be viewed as (1) high, (2) moderate, (3) low, (4) unqualified, and (5) none; but, can only be used in the relative sense with one area either having somewhat higher or lower potential than another. In this way potential deposits can be compared with the Nation's importance of need. This avoids comparing potential, hypothetical, or speculative undiscovered resources with other known or undiscovered resources in other parts of the nation or world.

TABLE A-1

EXPLANATION OF MINERAL GROUPS LISTED IN DESCENDING ORDER OF SIGNIFICANCE

Mineral Group Number	Explanation
1. Strategic or Energy-Related	Those minerals that are stockpiled and listed with strategic and /or critical materials or those minerals if not strategic are energy-related.
2. Import Reliance	Those minerals produced domestically that are supported with a 50 percent or more import reliance.
3. Major Export	Those minerals that are nationally important of which the U.S. is a net exporter.
4. Regional/Local Importance	Those minerals that are only of regional or local domestic importance.

Source: Bureau of Land Management, Las Vegas District, Caliente Wilderness EIS Team, 1983.

TABLE A-2

CLASSIFICATION OF MINERAL POTENTIAL*

Relative Potential	Explanation
1.	This class includes areas interpreted on the basis of known mineral deposits of A) Group 1,2, & 3 commodities existing in significant quantities and B) Group 1-4 commodities mined in the Planning Unit(includes presently producing areas).
2.	This class includes areas containing known mineral deposits with reserves and/or resources of A) Group 1,2, & 3 commodities not known in significant quantities, B) Group 1-4 commodities known in significant quantities but without significant demand and C) Inferred occurrences of significant amounts of Group 1,2, & 3 Class 1 commodities.
3.	This class includes areas interpreted to be favorable for future discovery of mineral deposits based on evaluation of geologic, geophysical and/or geochemical data (higher confidence than 4).
4.	This class includes areas for which the potential for mineral resources is interpreted on the basis of preliminary evaluation of geologic, mineral occurrence and limited field verification data only. No further analysis has been done.
5.	This class includes areas that could not be classified due to insufficient data and areas where known geology is considered unfavorable for the type of mineral deposit.

* Based on Commodity Significance (Table 3-1) and Occurrence Potential.

Source: Bureau of Land Management, Las Vegas District,
Caliente Wilderness EIS Team, 1983.

REFERENCES

Great Basin Joint Ventures, 1983. Geology-Energy Mineral Technical Reports. Great Basin GEM Joint Venture, April, 1983.

Kuchler, A. W. 1977. Potential Natural Vegetation of the United States. U.S.D.I., Geological Survey.

Mozingo, Hugh N. and Margaret William. 1980. Threatened and Endangered Plants of Nevada. U.S.D.I. BLM and Fish and Wildlife Service, University of Nevada, Reno Press, Reno, NV.

"Mule Deer Investigations and Hunting Season Recommendations" NDOW, 1982. Nevada Department of Wildlife, 1982. W-48-13. Reno, NV.

Nevada Division of State Parks. 1982. State-wide Comprehensive Outdoor Recreation Plan (SCORP) 1982, Carson City, NV.

Profile 2. 1982. A Program to Selectively Search and List Information on Wilderness Diversity." Created May 15, 1981 by Ron Kidner, Kirk Duffin, and Guy Tanaka. Revised Sept. 1, 1982 by Kirk Duffin. Shoshone, I.D.

Rusco and Munoz, 1983. An Archaeological Survey in the Mormon Mountains, Lincoln County, Nevada. USDI, BLM Technical Report No. 11., 1983.

USDI, BLM, 1976. Beaver Dam Intensive Inventory Habitat Management Plan and Final Environmental Analysis. Las Vegas District Office.

USDI, BLM, 1978. URA. Unit Resource Analysis. Bureau of Land Management, Las Vegas District Office. 1978.

USDI, BLM, 1979, Final Environmental Impact Statement on Proposed Domestic Livestock Grazing Management Program for the Caliente Crew. INT FES 79-44. Las Vegas, NV.

USDI, BLM, 1980. Mormon Mountains Habitat Management Plan and Final Environmental Analysis. Las Vegas District Office. WH4-T17.

USDI, BLM 1981. Wilderness Management Policy. Sept. 24, 1981. USGPO: Washington D.C.

USDI, BLM, 1982. Caliente Planning Unit Management Framework Plan. Bureau of Land Management, Las Vegas District Office. Feb. 1982.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Las Vegas District Office
4765 W. Vegas Drive
P.O. Box 26569
Las Vegas, Nevada 89126

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

AN EQUAL OPPORTUNITY EMPLOYER

U.S.MAIL

POSTAGE AND FEES PAID
U.S. DEPARTMENT
OF THE INTERIOR
INT 415